

California High-Speed Rail Authority



RFP No.: HSR13-57

**Request for Proposals for Design-Build
Services for Construction Packages 2 - 3**

**Reference Material, Part E.3 –
Merced – Fresno Master Streambed
Alteration Agreement**

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
 CENTRAL REGION
 1234 EAST SHAW AVENUE
 FRESNO, CALIFORNIA 93710



MASTER STREAMBED ALTERATION AGREEMENT
 NOTIFICATION NO. 1600-2013-0060-R4
 MADERA COUNTY AND FRESNO COUNTY

CALIFORNIA HIGH SPEED RAIL AUTHORITY
CALIFORNIA HIGH-SPEED TRAIN PROJECT – MERCED TO FRESNO SECTION –
PERMITTING PHASE 1 (PROJECT)

This Master Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and the California High-Speed Rail Authority (Permittee), as represented by Mark McLoughlin.

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on April 3, 2013 that Permittee intends to complete the Project described herein.

WHEREAS, pursuant to FGC section 1603, CDFW has determined that the Project could substantially adversely affect existing fish or wildlife resources and has included measures in this Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed this Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the Project in accordance with this Agreement.

PROJECT LOCATION

This Agreement covers the construction and maintenance activities described below within the larger Permitting Phase 1 Construction Footprint (defined herein) of the Merced to Fresno section of the California High-Speed Train (HST) Project (defined herein) and including associated habitat restoration activity required as mitigation for construction activities.

The Construction Footprint spans from Avenue 17 in the City of Madera (Madera County; Latitude 36°59'43.56"N, Longitude 120°2'34.34"W) to south of State Route 41 adjacent to Los Angeles Street in the City of Fresno (Fresno County; Latitude 36°43'25.66"N, Longitude 119°47'3.50"W) (Figure 1), and parallels the Burlington Northern Santa Fe Railway and Union Pacific Railroad/State Route 99 corridor. The Project areas authorized by this Agreement that are within the Construction Footprint consist of the six (6) stream crossings listed in Table 1 below, from north to south (see also Figures 2, 3, 4, 5, and 6).

Table 1. Locations of streams crossed by the Project within the Construction Footprint

Watercourse	USGS 7.5 Minute Quad				Coordinates		APNs ¹
	Name	Township	Range	Section	Latitude	Longitude	
Fresno River	Madera	11S	18E	8	39.983923°	-120.028727°	035-030-015
							037-112-002
							037-112-003
Main Canal ²	Madera	11S	18E	27	36.982002°	-120.026527°	035-030-017
							035-091-001
Cottonwood Creek ²	Gregg	11S	18E	27	36.945865°	-119.994280°	034-210-049
San Joaquin River ²	Herndon	12S	19E	31	36.843917°	-119.932427°	048-270-008
							048-270-009
							504-01-001
Herndon Canal ²	Herndon	13S	19E	10	36.814789°	-119.887056°	508-01-013
Dry Creek Canal ²	Fresno South	14S	20E	5	36.743270°	-119.812918°	458-01-019
					36.744657°	-119.810267°	458-01-020
					36.745471°	-119.808751°	458-24-032
							458-24-010
							458-24-033
							458-25-019
							458-25-009
							458-25-010
							459-20-001
							458-25-025

¹ APNs = Assessor's Parcel Numbers; ² These locations also include one APN that is public or not specified

This Agreement also authorizes habitat restoration activities completed as compensatory mitigation required by CDFW or other permitting agencies:

- A 3-acre riparian habitat restoration project will be implemented within the Lazy K Ranch on the south bank of the Chowchilla River. The site is located northeast of the City of Chowchilla, on the east side of South Santa Fe Avenue, south of the intersection with Marguerite Road, in Section 8, Township 9 South, Range 17 East MDB&M (Figure 7).
- A 1.5-acre site of riparian habitat restoration or enhancement along the San Joaquin River. The site has not yet been selected and approved by CDFW but will be located between Friant Dam and State Route 99.

DEFINITIONS

The definitions below apply to this Agreement.

“Bank”: The land, including its vegetation, that bounds the channel (defined herein) of a stream (defined herein), and that defines the lateral extent of that feature’s waters. Banks are the land that confines or otherwise defines the boundary of a stream when its water rises to the highest point of confinement to a definite course. In some cases, the banks can be slight or nearly imperceptible. The landward extent of a stream bank for concrete-lined or modified earthen channels is defined by the horizontal distance necessary to protect the stability of the bank; the horizontal boundary of the bank is commonly defined by the distance twice that of the bank height.

“Bed”: The land beneath a stream and its outermost banks; the portion of a stream directly beneath the water as defined by the highest stream flow at which these waters are confined to a definite watercourse. The bed may extend laterally beneath the banks where subsurface hydrologic connectivity exists between the stream and the surrounding land.

“CDFW jurisdictional area”: The stream bed, bank, channel, or associated riparian vegetation (all defined herein) within and adjacent to the California HST Project Construction Footprint.

“California HST Project”: The construction, operation, and maintenance activities included in the development of Permitting Phase 1 in the Merced to Fresno section of the California High-Speed Train project and habitat restoration activities, as analyzed by the California High-Speed Rail Authority (Authority) in the California High-Speed Train: Merced to Fresno Section Final Project Environmental Impact Report/Environmental Impact Statement (EIR/EIS), (State Clearinghouse No. 2009091125) dated April 2012 that the Authority certified for Permitting Phase 1 of the California High-Speed Rail Project Merced to Fresno Section on May 3, 2012; Biological Resources and Wetlands Technical Report dated April 2012; Wetlands Delineation Report dated April 2012; Noise and Vibration Technical Report dated April 2012; Addendum 2013-1 to the Final Merced to Fresno Project Section EIR/EIS dated October 2013, Addendum 2013-2 to the Final Merced to Fresno Section Project EIR/EIS dated November 2013; and Permittee-Responsible Mitigation Plan for On-site and Off-site Mitigation for Permitting Phase 1 of the Merced to Fresno Section dated November 2013.

“Channel”: The course of a stream through which water flows perennially, intermittently, or ephemerally. The channel is defined by the area in which water currently flows, or has flown over a given course during the historic hydrologic regime, and where the width of the course can reasonably be defined by geomorphic or vegetative indicators. The historic hydrologic regime is that which existed prior to the anthropogenic changes to the Californian landscape and waterbodies that increased with the accelerated settlement of the state after 1800. The channel is not defined by a particular flow event, but rather by the topography or elevations of land that confine the water to a definite course when the water rises to its highest point.

“Construction Activity”: A Covered Activity pertaining to the initial development of the California HST Project, including site preparation and facility or structure installation or construction.

“Construction Footprint”: The 1,049-acre area within which construction and installation of the system components and maintenance activities during operations that follow construction will occur, along the length of the 24.1 mile Permitting Phase 1 section of the Merced to Fresno HST. Figures 2, 3, 4, 5, and 6 show the general extent of the Construction Footprint at each crossing location.

“Covered Activity”: Each activity listed in the section Covered Activities, below, that is part of or by itself a Project activity included in the overall California HST Project and that would be conducted within a CDFW jurisdictional area (defined herein).

“Day”: A calendar day, unless otherwise specified.

“Daylight hours”: The daytime period between sunrise and sunset.

“Diameter at breast height (DBH)”: The diameter of the trunk of a tree or shrub at a distance measured 4.5 feet above grade.

“Ecologically Sensitive Areas (ESA)”: Areas including: 1) CDFW jurisdictional areas outside the defined Work Site (defined herein); and 2) areas supporting sensitive species within or outside of the limits of a Work Site.

“Fish and wildlife resources”: Fish and wildlife as defined in FGC sections 45 and 711.2, subdivision (a), respectively.

“Habitat Management Lands” (HM Lands): Lands that are acquired, funded, and managed as compensatory mitigation for Project impacts.

“Ground disturbing activity”: Any activity causing a direct physical change to on-site soils.

“Maintenance Activity”: Covered Activities that will occur following the construction or installation of a particular facility or structure requiring subsequent, routine maintenance during Project operation. Each Maintenance Activity shall be completed within limits of the Construction Footprint.

“Non-native plant species”: Plant species introduced to California after European contact and as a direct or indirect result of human activity.

“Protective Measures”: The best management practices, avoidance, minimization, compensatory mitigation measures, and any other measure identified in this Agreement under the heading Measures to Protect Fish and Wildlife Resources, and in any approved Subnotification (defined herein), the purpose of which is to protect fish and wildlife resources that could be substantially adversely affected by a Covered Activity.

“Restoration Activity”: Covered Activities involving the creation or enhancement of riparian vegetation (defined herein), or planting trees as replacement for trees removed during Construction Activities.

“Riparian vegetation”: Vegetation that grows in areas adjacent to streams and that depends on these water sources for soil moisture. This definition includes plants in each strata; native and non-native plant species; and plant species that could be considered either more aquatic or more terrestrial.

“Stream”: A body of flowing water, including water sources, and the landform that conveys it, including adjoining landscape elements that are byproducts of and affected by interactions with flowing water without regard to size, duration, or the timing of flow. Streams include natural watercourses and also watercourses that were natural in origin that remain hydrologically connected to their surface and subsurface sources of water but that have been straightened, widened, or otherwise altered, for example, to manage floodwaters or to deliver irrigation water.

“Subnotification”: The Subnotification Form attached hereto as Attachment 1 that Permittee must submit to CDFW before beginning a Covered Activity in accordance with this Agreement.

“Work Site”: The limits of the required access routes and encroachment into any CDFW jurisdictional areas.

COVERED ACTIVITIES

This Agreement is applicable to each Covered Activity listed below according to the following categories:

Construction Activities:

- Access roads;
- Bank stabilization, including fill material;
- Bridges, new;
- Bridges, replacement;
- Culverts, new;
- Culverts, replacement;
- Erosion control;
- Excavation;
- Geotechnical surveys and testing;
- Grading cut and fill;

- Horizontal directional drilling;
- Installation of access-restricted fencing;
- Removal or trimming of riparian vegetation;
- Sediment removal;
- Seismic refraction;
- Storm drain outfall structures;
- Stream diversions and dewatering;
- Trenching;
- Tunneling;
- Utility crossings, new;
- Utility crossings, relocation;
- Vegetation clearing and grubbing;
- Wildlife exclusion fencing.

Maintenance Activities:

- Bank stabilization including fill material;
- Erosion control;
- Grading cut and fill;
- Removal of trash or debris, to remove discarded items or items originating upstream, from culverts or from the bed, bank, channel, or riparian vegetation under bridges, to maintain flows and prevent or remove potential impacts to Project infrastructure. Trash and debris items may include dead vegetation and items such as appliances, household trash, parts of vehicles or mechanized equipment, etc.;
- Removal/trimming of riparian vegetation, as necessary to keep areas around structures and facilities clear;
- Sediment removal around culverts, to match original or prevailing channel slopes, not to exceed disturbance 25 feet upstream or downstream of the culvert;
- Stream diversions and dewatering, if necessary to complete maintenance work.

Restoration Activities.

- Bank stabilization including fill material;
- Erosion control;
- Excavation;
- Grading cut and fill;
- Planting of native plant species;
- Removal/trimming of nonnative plant species;
- Sediment removal;
- Stream diversions and dewatering;
- Trenching for irrigation;
- Trimming of native vegetation for cuttings to be planted;
- Vegetation clearing and grubbing.

IMPACTS TO CDFW JURISDICTIONAL AREAS

The Project will impact CDFW jurisdictional areas adjacent to the Fresno River, Main Canal, Cottonwood Creek, San Joaquin River, Herndon Canal, Dry Creek Canal, and Chowchilla River. Under this Agreement, Permittee may impact habitats within CDFW jurisdictional areas during Construction Activities to the extent summarized in Table 2 below, unless otherwise authorized by CDFW.

Table 2. Acreages of Construction Activity impacts to CDFW jurisdictional areas.

Watercourse	Area of Unvegetated Channel Impact		Area of Riparian Vegetation Impact	
	Permanent Impacts	Temporary Impacts	Permanent Impacts	Temporary Impacts
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
<i>Fresno River</i>	0.26	0.28	0.23	0.21
<i>Main Canal</i>	0.05	0.10	0.00	0.00
<i>Cottonwood Creek</i>	0.33	0.00	0.52	0.00
<i>San Joaquin River</i>	0.57	0.39	0.58	0.39
<i>Herndon Canal</i>	0.15	0.01	0.00	0.00
<i>Dry Creek Canal</i>	0.22	0.00	0.00	0.00
TOTAL	1.58	0.78	1.33	0.60

Maintenance Activities identified as Covered Activities in this Agreement are not expected to disturb any additional acreage above that identified in Table 2; however, routine disturbance to soils and vegetation within the Construction Footprint may occur during the completion of Maintenance Activities.

Restoration Activities will result in temporary impacts to areas that currently support or can be enhanced to support riparian vegetation, on approximately 3.0 acres on the Chowchilla River (Lazy K Ranch), and on approximately 1.5 acres on the San Joaquin River.

During the Subnotification review and approval process (see Subnotification, below), CDFW shall verify the acreages of CDFW jurisdictional areas that would be impacted by Covered Activities. In annual reporting, Permittee shall track the acreage of impacts to CDFW jurisdictional areas (see Reporting Measures, below).

NOTIFICATION AND APPROVAL PROCEDURE

Before beginning any Covered Activity that will be located in or adjacent to a stream or riparian vegetation, Permittee shall submit to CDFW a Subnotification in accordance with the notification and approval process described below.

1. Subnotification

Before beginning a Covered Activity, Permittee shall notify CDFW of the Covered Activity by completing the Subnotification Form attached hereto as Attachment 1, and shall submit the form, the Mitigation Monitoring and Reporting Program (MMRP) that will be associated with the particular Subnotification (Attachment 2) (see Reporting Measures, below), and the appropriate fee to CDFW (see Fees, below).

1.1 CDFW Review.

- (a) Completeness Determination. CDFW shall determine whether the Subnotification is complete by comparing it to the Subnotification Completeness Checklist attached hereto as Attachment 3. In accordance with the Permit Streamlining Act (Gov. Code Section 65920 et seq.), if CDFW does not respond within 30 days of receiving the Subnotification, then the Subnotification shall be deemed complete by operation of law. If additional information is required, CDFW will notify Permittee and describe the additional information that is required to make the Subnotification complete. In the event that CDFW deems the Subnotification to be incomplete, the receipt of subsequently submitted information by Permittee shall start an additional 30-day period during which CDFW shall determine the completeness of the Subnotification. If Permittee is funding one or more staff positions in CDFW's Central Region office, then the 30-day time periods above shall be reduced to 14 days.

(b) Subnotification Approval.

1. Time Period. After CDFW determines that the Subnotification is complete, or the Subnotification is deemed complete in compliance with the Permit Streamlining Act, CDFW shall begin reviewing the Subnotification for consistency with this Agreement and for potential adverse impacts to fish and wildlife resources. No more than 30 days from the date that the Subnotification is deemed complete, CDFW shall approve or disapprove the Subnotification. If the Subnotification is not consistent with this Agreement or if potential impacts to fish and wildlife resources are not adequately addressed, CDFW shall notify Permittee in writing of the disapproval and explain the actions necessary to address any deficiency, including additional Protective Measures to protect fish and wildlife resources (see Subsection (c) below, Concurrence Determination). If CDFW does not approve or disapprove the Subnotification within 30 days, Permittee may begin the Covered Activity as described in the Subnotification without CDFW's express approval, provided that prior to beginning the work Permittee provides CDFW notice of the intent to proceed without CDFW's express approval.
2. Criteria. CDFW shall approve the Subnotification in writing if: 1) the activity described therein is a Covered Activity; 2) the Protective Measures identified in the Subnotification Form protect those fish and wildlife resources that the Covered Activity could adversely affect, as previously determined prior to the approval of this Agreement; and 3) the fee submitted with the Subnotification is correct.

- (c) Concurrence Determination. If CDFW approves the Subnotification, it shall provide Permittee with written approval. Upon receipt of the approval, Permittee may begin the Covered Activity as described in the Subnotification, provided Permittee has obtained all other necessary authorizations for the work. If CDFW disapproves the Subnotification, it shall notify Permittee in writing and identify the reason(s) for disapproval. In response, Permittee may: 1) revise the Subnotification Form to address the reasons for disapproval; 2) submit an Agreement amendment request with the previously submitted Subnotification Form (see Section 2, Different Activities or Protective Measures, below); or 3) dispute CDFW's disapproval in accordance with the dispute resolution procedure (see Dispute Resolution, below).

2. Different Activities or Protective Measures

This Agreement allows Permittee to complete the Covered Activities and to implement the Protective Measures listed herein. If Permittee intends to complete a different activity or implement a different Protective Measure, Permittee shall submit to CDFW a request for an amendment (see Amendment, below). This amendment may accompany a new Subnotification Form or a previous Subnotification Form that was disapproved by

CDFW. A “different” activity refers to either: 1) an activity not covered by this Agreement, or a Protective Measure not listed herein; or 2) a Covered Activity or Protective Measure that Permittee proposes to modify. CDFW shall approve a request for amendment if it will not adversely affect fish and wildlife resources because Protective Measures in the amendment request, in this Agreement, or added by CDFW as a condition of amendment approval will be adequate to protect fish and wildlife resources that could be adversely affected. The MMRP should be revised to reflect any changes to Protective Measures and such revision should be provided to CDFW along with any request for an amendment. Such revision should indicate if it applies to the MMRP for a particular Subnotification or if it should apply to all subsequent Subnotifications. If CDFW disapproves a request for amendment, Permittee may submit a separate standard Notification to CDFW in accordance with FGC section 1602.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

1.1 Documentation at Project Sites.

- (a) Permittee shall make this Agreement, the approved Subnotification (or Subnotification submitted to CDFW, if CDFW did not respond within the review period described above), any extensions and amendments to this Agreement, and all related notification materials, and California Environmental Quality Act (CEQA) documents readily available at the Work Site at all times and shall be presented to CDFW personnel or personnel from another State, Federal, or local agency upon request.
- (b) Permittee shall ensure that a representative of Permittee is present during Covered Activities to oversee and verify that work is conducted in compliance with this Agreement, the approved Subnotification (or Subnotification submitted to CDFW, if CDFW did not respond within the review period described above), and any extensions and amendments to this Agreement.

1.2 Providing Agreement to Persons at Work Site. Permittee shall ensure that copies of this Agreement, approved Subnotification (or Subnotification submitted to CDFW, if CDFW did not respond within the review period described above), and any extensions and amendments to this Agreement are provided to all persons who will be working at the Work Site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.

1.3 Notification of Conflicting Provisions. Permittee shall notify CDFW if Permittee determines or learns that a Protective Measure in this Agreement might conflict with a provision imposed on a Covered Activity by another local, State, or Federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.

- 1.4 Work Site Entry. Permittee agrees that CDFW personnel may enter Work Sites to verify compliance with this Agreement. Permittee shall provide CDFW entry to any Work Site following a minimum 24 hours' notice.
- 1.5 Legal Obligations. This Agreement does not exempt Permittee from complying with all other applicable local, State, and Federal law, or other legal obligations.
- 1.6 Unauthorized Take. This Agreement does not authorize the "take" ("take" is defined in FGC Section 86 as to hunt, pursue, catch, capture, or kill; or attempt to hunt, pursue, catch, capture, or kill) of State- or Federally-listed threatened or endangered species. Any such "take" shall require separate permitting as may be required.
- 1.7 Property Not Owned by Permittee. To the extent that the Protective Measures of this Agreement provide for activities that require Permittee to enter on another owner's property, they are agreed to with the understanding that Permittee possesses the legal right to so enter.
- 1.8 Water Diversion. To the extent that the Protective Measures of this Agreement provide for the diversion of water, they are agreed to with the understanding that Permittee possesses the legal right to divert such water.
- 1.9 Training. Prior to starting any Covered Activity, Permittee shall provide all workers with training from a qualified individual on the contents of this Agreement, the corresponding Subnotification, any amendments or extensions, the resources at stake, and the legal consequences of non-compliance.

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each Protective Measure listed below.

- 2.1 Construction/Work Hours. Permittee shall conduct Covered Activities during daylight hours only (sunrise to sunset) except for equipment maintenance, security patrols, and emergency (defined by an imminent threat to life or significant property) activities. Permittee shall notify CDFW as soon as possible and no later than 24 hours after commencement of any emergency nighttime activities. Permittee shall not use permanent or temporary, fixed, exterior lighting, including motion-triggered security lighting that casts light beyond the construction footprint of Covered Activities within CDFW jurisdiction between sunset and sunrise.
- 2.2 Flagging/Fencing. Prior to conducting any Covered Activity, Permittee shall identify the limits of the Work Site. Permittee shall identify the Work Site with brightly-colored flagging/fencing and limit work to these defined areas only. Permittee shall maintain flagging/fencing in good repair for the duration of Covered Activities at that particular Work Site. All CDFW jurisdictional areas beyond the

Work Site shall be considered Ecologically Sensitive Areas (ESA) and shall not be disturbed.

2.3 Listed and Other Sensitive Species.

- (a) This Agreement does not allow for the “take” of any State- or Federally-listed threatened or endangered species. Liability for any “take” of such listed species remains the separate responsibility of Permittee for the duration of all Covered Activities. This Agreement also does not allow for the “take” of any fully protected species as defined by State law (see FGC Sections 3511, 4700, 5050, and 5515.).
- (b) Permittee affirms that no "take" of listed species is authorized beyond that described in Incidental Take Permit number 2081-2013-025-04 (ITP); the US Fish and Wildlife Service (USFWS) Biological Opinion of the California High-Speed Train System: Merced to Fresno Section Project, Merced, Madera, and Fresno Counties (Biological Opinion No. 08ESMF00-2012-F-0248, or as amended if applicable); and the National Marine Fisheries Service (NMFS) Biological and Conference Opinion on the High-Speed Train: Merced – Fresno action (File Number 151422SWR2011SA00573 (TN/2011/05794)), pursuant to the Federal Endangered Species Act. “Take” of any State- or Federally-listed threatened or endangered species that is inconsistent with either Biological Opinion(s) or the ITP, and “take” of any fully protected species, is prohibited. Permittee shall take prudent measures to ensure that all unpermitted “take” is avoided.
- (c) The area covered by this Agreement provides habitat for special status wildlife and plant species in addition to the listed species covered by the ITP. Any Covered Activities proposed and conducted under this Agreement shall at a minimum be consistent with the biological mitigation measures required by the Authority through its approval of the California High-Speed Train Project and related certification of the EIR/EIS (Attachment 4), except where those conflict with the ITP, any additional Protective Measures in this Agreement, or any Protective Measures proposed by Permittee or included by CDFW in an approved Subnotification. Where conflict occurs, the provisions of the ITP, Agreement, and Subnotifications prevail over mitigation measures in the EIR/EIS.
- (d) Permittee shall immediately notify CDFW of the discovery of any special status wildlife and plant species, fully protected species, threatened species, or endangered species prior to and/or during Covered Activity implementation.
- (e) Listed Plant Species: The State endangered succulent owl’s clover (*Castilleja campestris succulenta*), hairy orcutt grass (*Orcuttia pilosa*), and San Joaquin Valley orcutt grass (*Orcuttia inaequalis*) are not covered by the ITP but have the potential of occurring in areas covered by this Agreement. If suitable

habitat is present within the Work Site of Covered Activities proposed in a Subnotification, a qualified botanist shall conduct focused Plant Surveys for these plants. Repeated floristic surveys shall be conducted by a qualified botanist multiple times during the appropriate floristic period(s) in order to adequately assess the potential Project-related impacts to listed plant species. Permittee shall submit the results to CDFW for review and written approval in advance of commencing the Covered Activities (Permittee may submit survey results to CDFW prior to Permittee's submittal of the Subnotification). If any listed plant species is found, Permittee shall identify them with flagging and avoid with a 25-foot no disturbance buffer, or take alternative protective action proposed by Permittee and approved by CDFW in writing and in advance of commencing the Covered Activity. Alternatively, Permittee may apply for and acquire an Incidental Take Permit for the plant species or request amendment of the ITP to include the plant species.

- (f) Permittee shall allow any species designated as State species of special concern to move out of a Work Site of its own volition. Alternately, a qualified biologist who holds a Scientific Collecting Permit for the species shall move the individual(s) out of harm's way to the nearest area of suitable habitat at least 100 feet from the Work Site.

2.4 Fish and Wildlife.

- (a) If any fish or wildlife is encountered during the course of Covered Activities, Permittee shall allow said fish and wildlife to leave the Work Site unharmed.
- (b) For Project activities in the San Joaquin River that will require dewatering or diverting of water from the Work Site, Permittee shall complete all ground disturbance to install diversions and complete dewatering outside of the October 15 to June 15 breeding period for listed and sensitive status salmonids. If Covered Activities are completed between October 15 and June 15, Permittee shall wait to remove dewatering and diversion infrastructure, and to complete any restoration of the temporarily-disturbed portion to the Work Site to pre-activity conditions, until after June 15 and before October 15.
- (c) When any dam or other artificial obstruction is being constructed, maintained, or placed in operation to implement a Covered Activity, sufficient water shall at all times be allowed to pass downstream to maintain aquatic life below the dam, and to keep in good condition any fish that may be planted or exist below the dam, pursuant to FGC Section 5937.
- (d) At no time shall the entire flow of the San Joaquin River be blocked or rerouted, if fish could be prevented or impede the passing of fish either upstream or downstream past the Work Site.
- (e) Pursuant to FGC Sections 3503 and 3503.5, it is unlawful to "take," possess, or needlessly destroy the nest or eggs of any bird or bird-of-prey. To protect

nesting birds, no Covered Activity shall be completed from February 15 through July 31 unless a qualified biologist completes the following Avian Nesting Surveys within 30 days prior to commencing the Covered Activity.

Non-listed Raptors: Survey for nesting activity of raptors within a 500-foot radius of the Work Site. Surveys shall occur at appropriate nesting times and concentrate on trees and other habitat features with the potential to support raptor nests. If any active nests are observed, Permittee shall designate these nests and nest trees an ESA and protect them with a minimum 500-foot buffer until young have fledged and are no longer reliant on the nest site or parental care.

Other Non-listed Avian Species: Survey for nesting activity within a 250-foot radius of the defined Work Site. If any nesting activity is found, these nests shall be designated an ESA and protected with a minimum 250-foot buffer until young have fledged and are no longer reliant on the nest site or parental care.

CDFW may consider variances from these buffers when there is a compelling biological or ecological reason to do so, such as when the Work Site would be concealed from a nest site by topography.

- (f) All pipes with inside diameter of 4 inches or greater shall be capped or otherwise covered prior to being left overnight. If an animal is found in a pipe, the pipe shall be avoided and the animal(s) left to leave of their own accord. If a listed species is found occupying any pipe, all potentially disturbing activities shall be suspended immediately. Work shall not resume without CDFW written concurrence.
- (g) All trenches, holes, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope and that are between 2 and 8 feet deep shall be covered when workers or equipment are not actively working in the excavation or shall have an escape ramp of earth or a non-slip material with a 1:1 (45 degree) slope or flatter.
- (h) All trenches, holes, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope and greater than 8 feet deep shall be covered when workers or equipment are not actively working in the excavation and at the end of each work day.
- (i) A qualified biologist shall inspect all excavations (covered or open) for entrapped wildlife at the beginning, middle, and end of each day until the excavation is backfilled, including weekends and any other non-work days.
- (j) A qualified biologist shall inspect all excavated holes and trenches for entrapped wildlife immediately before the excavation is backfilled.

- (k) The outer 2 feet of excavation covers shall conform to solid ground so that gaps do not occur between the cover and the ground. Covering such gaps with dirt or laying covers on excavated soil will not satisfy this requirement. The outer 2 feet of cover material shall be semi-rigid and secured to the ground to preclude wildlife from lifting the edge (hardware cloth shall be used unless another material is approved by CDFW). The edges of the covers shall be secured with re-bar, minimum 10-inch soil staples, or similar means every 12 inches to prevent wildlife from lifting the edges.

2.5 Vegetation.

- (a) Permittee shall document the number and species of all woody-stemmed plants in excess of four (4) inches diameter at breast height (DBH) that will be cut, chemically treated, or otherwise removed or are damaged during Covered Activities. Permittee shall replace trees and shrubs with a DBH of four (4) inches or greater that are damaged or removed, by replanting appropriate native species at a 3:1 ratio (replaced to lost), except that heritage trees 24 inches or greater in DBH shall require replanting of like species at a 10:1 ratio (see Compensatory Measure 3.1(a) and (b)).
- (b) Prior to initiation of any Covered Activity, Permittee shall identify and clearly mark all trees to be cut, chemically treated, or otherwise removed, to avoid accidentally removing trees that should not otherwise be affected.
- (c) Vegetation removal shall not exceed the minimum necessary to complete Covered Activities and shall only occur within the Work Site. Permittee shall restore the temporarily-disturbed portions of CDFW jurisdictional areas to as near their original condition as possible.
- (d) Permittee shall dispose of vegetation or other material removed from a Work Site at an appropriate and legal off-site location where the material cannot enter the stream channel. No such material shall be stockpiled in the streambed, banks, or channel, except that native vegetation removed from the channel may be chipped and the chips used as mulch for disturbed soil sites in or near Work Sites.
- (e) Permittee shall remove all disturbed non-native plant species from Work Sites. Permittee shall not use non-native plant species in mulching, composting, or otherwise placing in or around the Work Site. Permittee shall ensure that heavy equipment and other machinery is inspected for the presence of undesirable species and is cleaned prior to on-site use, to reduce the risk of introducing non-native plant species into the Work Site.

- ## 2.6 Diversion and Dewatering.
- If a Covered Activity cannot be completed when the Work Site is naturally dry, Permittee shall develop a Diversion Plan or Dewatering Plan and submit to CDFW for approval with the Subnotification. The Plan shall include but not be limited to the following:

- (a) When work in a flowing stream is unavoidable, Permittee shall divert the entire stream flow around or through the Work Site by a barrier, temporary diversion channel, and/or other means. The diversion shall allow stream flows to gravity flow around or through the Work Site, or stream flow shall be pumped around the Work Site using pumps and hoses. Permittee shall clearly identify the locations of the upstream and downstream diversion points. Construction of the barrier and/or the new channel shall normally begin in the downstream area and continue in an upstream direction, and the diversion shall only be implemented when construction of the diversion is completed. Diversion channel and barrier construction shall be adequate to prevent seepage into or from the Work Site. Channel barriers shall only be made of earth or other substances subject to erosion if first enclosed by sheet piling, rock riprap, or other protective material. Permittee shall place trench material from stream channels outside the stream's ordinary high water mark or on dry portions within the stream's ordinary high water mark when the material is placed on filter fabric. Permittee shall remove the barrier and supportive material promptly when the work is completed, except as specified in Avoidance and Minimization Measure 2.4(b) for Covered Activities on the San Joaquin River. Barrier removal shall proceed from downstream in an upstream direction.
- (b) Flow diversion shall be done in a manner to prevent pollution and/or siltation, and to provide flows to downstream reaches. Flows to downstream reaches shall be provided during all times that the natural flow would have supported aquatic life; said flows shall be of sufficient quality and quantity, and of appropriate temperature to support aquatic life, both above and below the diversion. Normal flows shall be restored to the affected stream immediately upon completion of work at that location.
- (c) Permittee shall implement dewatering in a manner that is not harmful to fish or other aquatic or semi-aquatic wildlife: the suction end of the intake pipe shall be fitted with fish screens intended to prevent entrainment or impingement of small fish:
(http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp).
- (d) Any turbid water pumped from the Work Site, including water pumped to maintain all or a portion of the Work Site in a dewatered state, shall be placed in a settling pool to allow the sediment to drop out. Once the water is clear, it shall be returned to the stream to maintain water flow. Settling pools, including all fill, enclosure material, and trapped sediments, shall be removed when the Covered Activity is completed.

2.7 Fish Rescue.

- (a) If a Covered Activity will require dewatering or diversion of water to create dry conditions and fish are or may be present within the Work Site, Permittee shall develop a Fish Rescue Plan and submit to CDFW for approval with the Subnotification. The Fish Rescue Plan shall include, but not be limited to, the

name(s) of the qualified fisheries biologist(s) who will handle the fish, a list of the State and Federal permits possessed by the qualified biologist(s) to handle the fish, the method(s) of fish capture to be used, identification of the relocation site(s) for captured fish, the method(s) used for transporting the rescued fish to the relocation site(s), and the method(s) used for minimizing the risk of stress and mortality due to capture and handling of the fish.

- (b) Permittee shall maintain a record of all fish rescued and moved for Covered Activities included in each Subnotification. The record shall include, at a minimum, the date of capture and of relocation, the method of capture, location of relocation in relation to the Project site, and the number and type of fish captured and relocated. Permittee shall include any fish rescue records in the next annual report submitted to CDFW.

2.8 Sufficient Water for Fish Existing Below Dams. When any dam or other artificial obstruction is being constructed, maintained, or placed in operation to implement a Covered Activity, sufficient water shall at all times be allowed to pass downstream to maintain aquatic life below the dam, and to keep in good condition any fish that may be planted or exist below the dam, pursuant to FGC Section 5937.

2.9 Vehicles and Equipment.

- (a) Permittee shall not operate vehicles within surface water of a Work Site. When necessary to complete a Covered Activity, Permittee shall only operate vehicles between the banks of any stream during dry conditions.
- (b) Permittee shall limit construction vehicle access to stream banks and beds to predetermined ingress and egress corridors from existing roads. All other areas adjacent to a Work Site shall be an ESA and shall remain off-limits to vehicles and equipment.
- (c) During Covered Activities, Permittee shall check and maintain daily any equipment or vehicles driven and/or operated within or adjacent to a stream to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic and terrestrial life.
- (d) Permittee shall locate staging and storage areas for equipment, materials, fuels, lubricants, and solvents outside of the stream and adjacent vegetation. For stationary equipment located within or adjacent to a stream, such as motors, pumps, generators, compressors and welders, Permittee shall ensure the continuous use of drip-pans or other containment. Permittee shall move vehicles away from the stream prior to refueling and lubrication.

2.10 Structures. Permittee confirms that any and all structures and constructed features shall be properly aligned and otherwise engineered, installed, and maintained to accommodate high flows, to assure resistance to washout and to erosion of the stream bed, banks, and/or fill, and that they will not cause long-term changes in

water flows that adversely modify the existing upstream or downstream stream bed/bank contours or increase sediment deposition.

- (a) Permittee shall provide with any Subnotification final site plans, with documentation from a registered and licensed civil engineer that the structures and other constructed features are designed to accommodate and withstand 100-year flood events, including hydrologic studies to ensure appropriate sizing of structures in order to adequately convey flows while avoiding any impacts to the channel morphology. For structures proposed in a stream with one or more existing culvert(s) or other constructed structures, the documentation that Permittee provides shall address cumulative hydrological stream function for the entire stream.
- (b) Permittee shall limit the installation of permanent, access-restricted fencing to areas above the stream's ordinary high water mark, outside of the active, wetted channel.

2.11 Fill/Spoil.

- (a) Spoil storage sites shall not be located within any stream, or where spoil will be washed into a stream. Rock, gravel, and/or other materials shall not be imported into or moved within the stream bed or banks, except as otherwise addressed in this Agreement.
- (b) Permittee shall limit fill to the minimal amount necessary to accomplish the Covered Activities, and move excess fill material off-site at Covered Activity completion.

2.12 Erosion.

- (a) Permittee shall not engage in Covered Activities during or within 24 hours following significant rainfall events (1/4-inch in any 24-hour period), or when there is water present (except in compliance with a Diversion Plan or a Dewatering Plan, see Avoidance and Minimization Measure 2.6 above).
- (b) Permittee shall stabilize all disturbed soils to reduce erosion potential both during and following Covered Activities. Permittee may use temporary erosion control devices, such as straw bales, silt fencing, and sand bags, as appropriate, to prevent siltation of CDFW jurisdictional areas. To minimize the risk of ensnaring and strangling wildlife, coir rolls, erosion control mats or blankets, straw or fiber wattles, or similar erosion control products shall be composed entirely of natural-fiber, biodegradable materials. Permittee shall not use "photodegradable" or other plastic erosion control materials.
- (c) Permittee's ability to minimize siltation shall be the subject of preconstruction planning and feature implementation. Precautions to minimize siltation may require that the Work Site be isolated so that silt or other deleterious materials are not allowed to pass to downstream reaches. If it is determined that silt

levels resulting from a Covered Activity constitute a threat to aquatic life, activities associated with the siltation shall be halted until effective CDFW-approved control devices are installed, or abatement procedures are initiated.

2.13 Pollution.

- (a) Permittee shall not dump any litter or construction debris within CDFW jurisdictional areas. Permittee shall pick up all such debris and waste daily and dispose of it properly at an appropriate off-site location. Permittee shall remove all materials used in Covered Activities from the stream and from areas where such materials could be washed into the stream.
- (b) Permittee shall prevent raw cement, concrete or washings thereof; asphalt; drilling fluids or lubricants; paint or other coating material; oil or other petroleum products; or any other substances that could be hazardous to fish or wildlife resulting from or disturbed by Covered Activities, from contaminating the soil and/or entering a stream.
- (c) Permittee is aware that it, and any contractors, remains subject to FGC Section 5650 and 12015, which are related to water pollution.
- (d) Permittee shall install the necessary containment structures to control the placement of wet concrete and to prevent it from entering into the channel outside of those structures. Permittee shall maintain secondary containment in addition to forms that are used to hold the shape of the concrete while it dries. No concrete shall be poured below the top of the bank if the 10-day National Weather Service weather forecast indicates any chance of rain. At all times when Permittee is pouring or working with wet concrete there shall be a designated monitor to inspect the containment structures and ensure that no concrete or other debris enters into the channel outside of those structures. Poured concrete shall remain isolated from surface waters and allowed to dry/cure within the containment area for a minimum of 30 days. CDFW may provide written approval of a variance to the curing time in this measure if Permittee either 1) demonstrates that the concrete will not come into direct contact with surface water or soils as a result of Project design features, or 2) monitors the pH of new concrete relative to the baseline, pre-Project pH of the Work Site, until it decreases to a level approved in advance by CDFW. No variance shall be implemented unless CDFW has provided approval in writing and in advance.
- (e) Permittee shall submit for CDFW written approval an Emergency Response Plan with the Subnotification submitted for Covered Activities under this Agreement. Permittee shall keep the Plan on-site during all Covered Activities. The Plan shall identify the actions that shall be taken in the event of a spill of petroleum products, contaminated soil, or other material harmful to fish, plants, or aquatic life. Emergency response materials shall be kept at Work Sites and readily available to allow rapid containment and cleanup of any spilled material. The cleanup of all spilled materials shall begin

immediately. Permittee shall contact CDFW within 24 hours of any hazardous material spill, including but not limited to petroleum products.

2.14 Horizontal Directional Drilling Measures.

- (a) Permittee shall ensure that benign material is used in the drilling muds, to avoid contamination of any water or habitat. At no time shall drill cuttings, drilling mud, and/or materials or water contaminated with bentonite or any other substance deemed deleterious to fish or wildlife be allowed to enter the stream or be placed where they may be washed into the stream. Any contaminated water/materials from the drilling and/or Project activities shall be pumped or placed into a holding facility and removed for proper disposal.
- (b) Drilling shall not occur adjacent to instream structures, such as pilings. If instream structures are present, the bore shall be deep enough to minimize frac-out potential.
- (c) Permittee shall ensure that the drilling contractor has a minimum of two (2) years' experience in conducting horizontal directional drilling operations, and that the contractor utilizes inspectors that have completed training, such as the two-day directional drilling course provided by the California Department of Transportation (Caltrans) or Baroid Industrial Drilling Products, Inc.
- (d) Inspectors shall be on-site throughout drilling activity, and shall conduct or oversee monitoring of the channel and adjacent habitats during drilling.
- (e) Permittee shall ensure that the quality and quantity of drilling fluid return is monitored. Pressure levels shall be monitored randomly and recorded by inspectors, and pressure levels shall be set at minimum feasible levels to prevent frac-out.
- (f) All inspectors shall have the responsibility and authority to make recommendations to the drilling operators and, if necessary, shut down operations if Permittee or drilling contractors are not following procedures that minimize frac-outs.
- (g) Permittee shall ensure continuous monitoring of the drilling operation to ensure that adequate protection controls have been installed. All field personnel shall be briefed on their responsibility for timely reporting of frac-out releases to the monitor on-site. At least one (1) person shall be specifically designated for the task of observing the stream from the crossing site to a minimum of 100 feet downstream to observe for locations of frac-out.
- (h) In the event of frac-out, all Project activity shall cease immediately, and containment and clean-up as described in an approved Frac-Out Contingency Plan shall commence immediately (see Avoidance and Minimization Measure 2.14(i), below).

- (i) A Frac-Out Contingency Plan shall be submitted for approval with each Subnotification that includes Horizontal Directional Drilling. The approved Plan shall be on-site at all times and all contractors shall have pre-arranged duties in case of a frac-out. The Contingency Plan shall include but not be limited to name(s) and phone numbers of biological monitor(s) and crew supervisor(s); documentation of the experience of the boring contractor and the training of their inspector(s), site-specific resources of concern, including factors such as possible presence of sensitive species; monitoring protocols, including biological monitoring and frac-out monitoring; containment and cleanup plan, including staging location of vacuum trucks and equipment, equipment list, necessary hose lengths, number of sand bags and specifications on diverting flow around frac-out, etc.; and demonstration that Permittee shall have full access from the Right of Way to the stream through gates that may be locked and maintained by any agency. Permittee shall ensure that all necessary equipment and personnel are on-site and prepared for immediate response in the event of frac-out.
- (j) If frac-out occurs, Permittee shall consult with CDFW for authorization to proceed with Project activity. Alternate Project methods and additional Protective Measures may be warranted.

3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each Protective Measure listed below.

3.1 Restoration/Revegetation.

- (a) Chowchilla River (Lazy K Ranch): Permittee shall compensate for tree and shrub removal from the Fresno River, Main Canal, and Cottonwood Creek Work Sites by planting replacement trees and shrubs at the replacement rates described in Avoidance and Minimization Measure 2.5(a) within the 3-acre riparian habitat restoration site at the Lazy K Ranch on the south bank of the Chowchilla River (see Figure 7) and through the acquisition and management of those 3 acres at the Lazy K Ranch as Habitat Management lands (HM lands).

As part of the Management Plan for the HM lands on the Lazy K Ranch, as required by Compensatory Measure 3.2(a)5, Permittee shall include sufficient detail to address the replacement plantings of trees and shrubs, including measures to be taken to ensure a performance criterion of 70 percent survival of plantings for a minimum period of five (5) consecutive years, including up to three (3) years with supplemental irrigation, and a minimum of two (2) years without such assistance. The Management Plan shall propose the planting location(s) and include requirements for annual monitoring, intermediate performance criteria, and remedial actions in the event that plantings are not successful. Any subsequent planting after the initial planting

shall start a new minimum 5-year monitoring and reporting requirement for the new plantings. Permittee shall submit to CDFW an annual report of the progress of the replacement plantings, including any problems reaching intermediate performance criteria and any remedial action completed during the last year or planned during the following year. CDFW will provide written documentation when it has determined that replacement plantings have been successfully established.

- (b) San Joaquin River: Permittee shall compensate for impacts to CDFW jurisdictional areas at the San Joaquin River Construction Activity Work Site through the acquisition and management of 1.5 acres of Habitat Management lands (HM lands) at a CDFW-approved location on the San Joaquin River between State Route 99 and the Friant Dam. The HM lands shall support or be capable of supporting native riparian vegetation that can be further enhanced through management.

Permittee shall complete restoration or enhancement of the HM lands, as deemed warranted by CDFW, in order to create or enhance riparian vegetation. As part of the Management Plan for the HM lands at the San Joaquin River site, as required by Compensatory Measure 3.2(a)5, Permittee shall include sufficient detail to address planting of trees and shrubs removed from the San Joaquin River Construction Activity Work Site per the replacement rates described in Avoidance and Minimization Measure 2.5(a), any additional required tree and understory plantings for habitat creation, maintenance of native-dominant riparian habitat during and after establishment, monitoring to determine the success of plantings, success criteria during the establishment phase that consist of percent cover of different vegetation strata, and remedial actions to be taken if success criteria are determined to not be on track to being met. If CDFW determines that the HM lands selected already consist of riparian vegetation that does not require additional riparian habitat creation, the Management Plan shall still include the requirements for replacement planting, including success criteria, remedial actions, and reporting as described in Compensatory Measure 3.1(a).

- (c) If Covered Activities cause any exposed slopes or other exposed areas, after Covered Activities are complete these areas shall be seeded (with weed-free straw or mulch) with a blend of a minimum of three (3) locally native grass species. One (1) or two (2) sterile non-native perennial grass species may be added to the seed mix provided that amount does not exceed 25 percent of the total seed mix by count. Locally native wildflower and/or shrub seeds may also be included in the seed mix. The seeding shall be completed as soon as possible after Covered Activity completion, no later than November 15 of the year the Covered Activity ends, or as approved in writing by CDFW. Permittee shall submit a seed mixture to CDFW for approval with the Subnotification for the corresponding Covered Activity. At the discretion of CDFW, all exposed areas where seeding is considered unsuccessful after

90 days shall receive appropriate soil preparation and a second application of seeding, straw, or mulch as soon as is practical on a date mutually agreed upon.

- (d) Where suitable vegetation cannot be reasonably expected to become established per Compensatory Measure 3.1(c), non-erodible materials shall be used for such stabilization. Any installation of non-erodible materials not described in the Subnotification shall be coordinated with CDFW. Coordination may include the negotiation of additional Agreement or Subnotification Protective Measures for this activity.

3.2 Habitat Management Lands for Riparian Impacts. Permittee shall provide for the permanent protection and management of 3 acres of riparian habitat at the Lazy K Ranch on the Chowchilla River (per Compensatory Measure 3.1(a)) and 1.5 acres of riparian habitat on the San Joaquin River (per Compensatory Measure 3.1(b)) by completing the transfer of fee title or conservation easement to CDFW pursuant to terms approved by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a special district, non-profit organization, for-profit entity, person, or other entity to hold title or conservation easement to the property provided that the district, organization, entity, or person meets the requirements of Government Code section 65965, et seq., as amended. Permanent protection and perpetual management of compensatory habitat must be complete within 18 months of the date on which the first Subnotification submitted pursuant to this Agreement is deemed complete by CDFW.

- (a) Habitat Acquisition and Protection. To provide for the acquisition and protection of the HM lands, Permittee shall:

1. Fee Title/Conservation Easement. Transfer fee title to the HM lands to CDFW pursuant to terms approved by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a special district, non-profit organization, for-profit entity, person, or other entity to hold title to the property provided that the district, organization, entity, or person meets the requirements of Government Code section 65965 et seq., as amended. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW does not hold the conservation easement, CDFW shall be named as a third-party beneficiary. Permittee shall obtain written CDFW approval of any conservation easement before its recordation;
2. HM Lands Approval. Obtain CDFW approval of the HM lands before acquisition and/or transfer of the land by submitting, at least three (3) months before acquisition and/or transfer of the HM lands, a formal

Proposed Lands for Acquisition Form (see Attachment 5) identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts to habitat;

3. HM Lands Documentation. Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents (see Attachment 6). All documents conveying the HM lands and all conditions of title are subject to the approval of CDFW, and if applicable, the Wildlife Conservation Board and the Department of General Services;
4. Land Manager. Designate an interim and long-term land manager approved by CDFW. The land manager may be the conservation easement grantee, land owner, or other party. Documents related to land management shall identify the land manager. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the mitigation land, CDFW will also act as long-term land manager unless otherwise specified;
5. Start-up Activities. Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval (see <http://www.dfg.ca.gov/habcon/conplan/mitbank/>); (2) conducting a baseline biological assessment and land survey report within four (4) months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage;
6. Interim Management (Initial and Capital). Provide for the interim management of the HM lands. The interim management period shall be a minimum of three (3) years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected annual management (described in the final management plan) following start-up activities. Interim management period activities include fence repair, continuing trash removal, site monitoring, vegetation and invasive species management, and potentially a grazing plan, depending on-site conditions. Permittee shall either (1) demonstrate to CDFW that funding is available for the minimum of three (3) years of interim management that the land owner, Permittee, or land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with instructions to pay the land manager annually in advance, (3) establish a short-term enhancement sub-account with the National Fish and Wildlife Foundation (NFWF) for annual payment to the land manager, or (4)

establish a short-term enhancement account with CDFW for annual payment to the land manager.

- (b) Endowment Fund. After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the in-perpetuity management of the HM lands by establishing a long-term management fund (Endowment Fund). The Endowment Fund is a sum of money held in a CDFW-authorized fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plan(s) required by Compensatory Measure 3.2(a)5. Endowment Fund as used in this Agreement shall refer to the endowment deposit and all interest, dividends, other earnings, additions, and appreciation thereon.

1. Identify an Endowment Fund Manager. The Endowment Fund shall be held by CDFW or a CDFW-approved fund manager;
2. Calculate the Endowment Funds Deposit. After obtaining CDFW approval of the HM lands, long-term Management Plan, and Endowment Fund Manager, Permittee shall prepare a Property Analysis Record (PAR) or PAR-equivalent analysis (hereinafter "PAR"), to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Fund Manager.
 - i. Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Fund Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.
 - ii. Endowment Buffers/Assumptions. Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment Fund:
 - 10 Percent Contingency. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.
 - Three (3) Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three (3) years after full funding.
 - Non-annualized Expenses. For all large capital expenses to occur periodically but not annually such as fence replacement

or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Fund Manager and CDFW.

3. Transfer Long-term Endowment Funds. Permittee shall transfer the long-term endowment funds to the CDFW-approved Endowment Fund Manager upon CDFW approval of the Endowment Deposit Amount identified above.
- (c) Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable expenses incurred by CDFW such as transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other State agency reviews, and overhead related to transfer of HM lands to CDFW.

4. Reporting Measures

Permittee shall meet each reporting requirement described below.

4.1 Obligations of Permittee

- (a) Permittee shall have primary responsibility for monitoring compliance with all Protective Measures in this Agreement. Protective Measures must be implemented within the time periods indicated in this Agreement and the program described below.
- (b) Permittee (or Permittee's designee) shall ensure the implementation of the Protective Measures, and shall monitor the effectiveness of these Protective Measures, as set forth in the MMRP, which is included as Attachment B. The MMRP Section 2 shall be submitted to CDFW with each Subnotification and completed for all the Covered Activities identified in the corresponding Subnotification. The MMRP for a particular Subnotification shall be appended to include any additional Protective Measures necessary for approval of that particular Subnotification (see Different Activities or Protective Measures above).

4.2 Reports. Permittee shall submit the following Reports to CDFW. It is Permittee's responsibility to ensure that CDFW receives Reports.

- (a) Annual Report. On or before January 15 of each calendar year, Permittee shall submit an Annual Report that includes the following:
 1. A schedule of Covered Activities proposed for the upcoming calendar year, to the extent that they are known at the time of Annual Report preparation, including map locations.

2. A list of the Covered Activities that were completed and ongoing at the end of the previous calendar year along with the corresponding Subnotification the Covered Activity is associated with.
3. For each Subnotification, documentation of worker training, results of required preconstruction surveys for nesting birds and any special status species (with the exception of listed plant surveys, which are due to CDFW for written approval prior to commencing Covered Activities), and a summary of all relocation efforts during the prior calendar year, summarized in tabular form and with figures indicating survey limits and sensitive species discovered.
4. For each Subnotification, a copy of the MMRP that was submitted with the corresponding Subnotification. The MMRP shall show the current implementation status of each Protective Measure.
5. A table tracking the acreages of impacts to CDFW jurisdictional areas, from Covered Activities completed during the previous calendar year and cumulatively for all Covered Activities under this Agreement.
6. Any fish rescue records resulting from Work Site dewatering.
7. Unless included in reporting related to the Management Plan for the HM lands, reporting on the progress of replacement plantings at the 3-acre Lazy K Ranch site on the Chowchilla River and at the 1.5-acre San Joaquin River site.
8. If no work authorized by this Agreement was completed during a calendar year, the Annual Report shall reflect that status.

(b) Four-Year Status Report. Permittee shall provide a status report to CDFW every four (4) years from the effective date of this Agreement, as required in FGC section 1605(g)(2). Permittee shall include the following in the report:

- A copy of this Agreement (original and any amendments);
- The status of the Covered Activities in this Agreement;
- An evaluation of the success or failure of the Protective Measures in this Agreement and in Subnotifications to protect the fish and wildlife resources that the Covered Activities may substantially adversely affect;
- A discussion of any factors that could increase the predicted adverse impacts on fish and wildlife resources, and a description of the resources that may be adversely affected.

CDFW shall review the Four Year Status report and conduct an on-site inspection with respect to this Agreement and any Subnotifications approved by CDFW, in accordance with FGC section 1605(g)(3), except Permittee and CDFW shall follow the procedure described below (see Dispute Resolution) to resolve any dispute.

If Permittee fails to provide Four Year Status Reports, CDFW may suspend or revoke this Agreement pursuant to FGC section 1605(g)(3).

CONTACT INFORMATION

Any communication that Permittee or CDFW submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or CDFW specifies by written notice to the other. Contact information below reflects Permittee and CDFW representatives at the time of issuance of this Agreement. Any change of representative shall be communicated in writing and include corresponding changes in contact information.

To Permittee:

California High-Speed Rail Authority
Attn: Mark McLoughlin
770 L Street, Suite 800
Sacramento, California 95814
Phone: (916) 403-6934
Fax: (916) 322-0827
Email: mark.mcloughlin@hsr.ca.gov

To CDFW:

California Department of Fish and Wildlife
Central Region
1234 East Shaw Avenue
Fresno, California 93710
Attn: Lake and Streambed Alteration Program - Amy Krisch
Notification #1600-2013-0060-R4
Phone: (559) 243-4017, extension 243
Fax: (559) 243-4020
Email: Amy.Krisch@wildlife.ca.gov

DISPUTE RESOLUTION

In the event of a dispute between Permittee and CDFW arising from either CDFW's disapproval of a Subnotification or Amendment, or a determination by CDFW after reviewing Permittee's four-year report that Permittee must implement additional Protective Measures to protect fish and wildlife resources, Permittee and CDFW shall

attempt to resolve the dispute in accordance with the procedure below. Dispute resolution does not apply when CDFW disapproves a Subnotification when an amendment request is warranted.

The CDFW contact and Permittee shall attempt to resolve the dispute within 14 days of Permittee's receipt of CDFW's disapproval notice. If the CDFW contact cannot resolve the dispute within 14 days, the dispute shall be elevated to the CDFW Regional Manager and Permittee's Vice President or General Manager, who shall attempt to resolve the dispute within 21 days. If the Regional Manager and Permittee's Vice President or General Manager cannot resolve the dispute within 21 days, the dispute shall be elevated to the CDFW Director and General Counsel and Permittee's General Manager, who shall attempt to resolve the dispute within 21 days. If the dispute is not resolved by CDFW's Director and General Counsel and Permittee's General Manager within 21 days, Permittee may request a panel of arbitrators to resolve the dispute in accordance with the procedures set forth in FGC section 1603(b) (if the dispute arises from CDFW's disapproval of a Subnotification or Amendment request) or 1605(g)(3) (if the dispute arises from a determination by CDFW that Permittee must implement additional Protective Measures to protect fish and wildlife resources).

LIABILITY

Permittee agrees that Permittee shall be responsible for any violations of this Agreement or a Subnotification under this Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its agent, officers, and employees, to complete the work authorized under this Agreement or the Subnotification.

This Agreement does not constitute CDFW's endorsement of, or require Permittee to proceed with, the Project. The decision to proceed with the Project is Permittee's alone.

FEES

The fees specified below are based on the current Lake and Streambed Alteration Program fee schedule in California Code of Regulations, Title 14, section 699.5. Permittee shall pay fees below, unless the fee schedule is amended and the fee changes. In the latter event, Permittee shall pay the new fee after it becomes effective.

- The base fee has already been paid for the application received in April 2013.
- The annual discretionary fee of \$3,070.00 shall be waived as long as Permittee is funding a dedicated position responsible for managing this Agreement, or a portion of such a position, though CDFW.
- Permittee shall submit \$307.25 for each Subnotification for construction activity or for restoration activity.
- Permittee shall submit \$122.75 for each Subnotification for maintenance activity.

- Permittee shall submit \$184.00 for each amendment request that constitutes a minor amendment pursuant to California Code of Regulations, Title 14, section 699.5, subd. (j).
- Permittee shall submit \$613.75 for each amendment request that constitutes a major amendment pursuant to California Code of Regulations, Title 14, section 699.5, subd. (k).
- Permittee shall submit the above fees in the form of a check made out to the California Department of Fish and Wildlife.

COMPLIANCE

If CDFW determines that Permittee is not in compliance with FGC section 1602, CDFW shall notify Permittee in writing of its determination in writing and provide instructions for compliance. Non-compliance with FGC section 1602 includes but is not limited to the following: 1) Permittee fails to notify CDFW of a Covered Activity prior to beginning the activity; 2) Permittee fails to comply with the terms and conditions of a Subnotification approved by CDFW; or 3) the Covered Activity Permittee completes is materially different from the one authorized in the Subnotification. This measure does not preclude CDFW from pursuing an enforcement action against Permittee.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety this Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with this Agreement.

Before CDFW suspends or revokes this Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before CDFW suspends or revokes this Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

ENFORCEMENT

Nothing in this Agreement precludes CDFW from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking this Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other Federal, State, or local laws or regulations before beginning the Project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 *et seq.* (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in this Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

CDFW may amend this Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend this Agreement and any Subnotification at any time, upon written, mutual agreement between CDFW and Permittee. To request an amendment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee (see Cal. Code Regs., Title 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of this Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of this Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee (see Cal. Code Regs., Title 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605(b), Permittee may request one (1) extension of this Agreement, provided the request is made prior to the expiration of this Agreement's term. To request an extension, Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's fee schedule at the time of the request (see Cal. Code Regs., Title 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e), or the applicable provisions of the FGC in existence at that time.

If Permittee fails to submit a request to extend this Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the Project this Agreement covers (FGC section 1605(f)).

EFFECTIVE DATE

This Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after Permittee's signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at http://www.wildlife.ca.gov/habcon/ceqa/ceqa_changes.html.

TERM

This Agreement shall expire 22 years from the date of CDFW's signature, unless it is terminated or extended before then. All Protective Measures in this Agreement shall remain in force throughout this Agreement's term. After this Agreement expires or is terminated, per FGC section 1605(a)(2) Permittee shall remain responsible for implementing any Protective Measure specified herein to protect fish and wildlife resources that is not already completed.

EXHIBITS

The documents listed below are included as exhibits to this Agreement and incorporated herein by reference.

- | | |
|----------|---|
| Figure 1 | Map of Project locations; |
| Figure 2 | Map of Construction Footprint at Fresno River and Main Canal; |
| Figure 3 | Map of Construction Footprint at Cottonwood Creek; |
| Figure 4 | Map of Construction Footprint at San Joaquin River; |
| Figure 5 | Map of Construction Footprint at Herndon Canal; |

Figure 6	Map of Construction Footprint at Dry Creek Canal;
Figure 7	Map Showing Location of Riparian Restoration on Chowchilla River
Attachment 1	Subnotification Form;
Attachment 2	Mitigation, Monitoring, and Reporting Program;
Attachment 3	Subnotification Completeness Checklist;
Attachment 4	Biological Resource Mitigation Measures from the California High-Speed Train: Merced to Fresno Section Final Project EIR/EIS;
Attachment 5	Proposed Lands for Acquisition Form;
Attachment 6	Habitat Management Lands Checklist.

AUTHORITY

If the person signing this Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the terms of this Agreement.

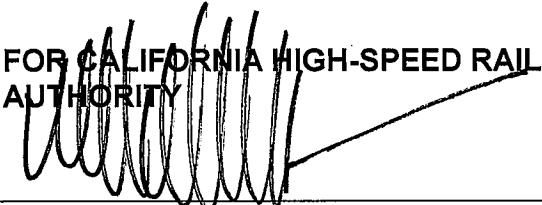
AUTHORIZATION

This Agreement authorizes only the Project Covered Activities described herein. If Permittee begins or completes a Project different from the Project this Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with FGC section 1602.

CONCURRENCE

The undersigned accepts and agrees to comply with all the terms of this Agreement.

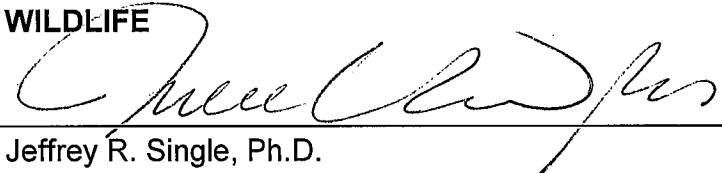
FOR CALIFORNIA HIGH-SPEED RAIL
AUTHORITY



Mark McLoughlin
Director of Environmental Planning Services

3/11/14
Date

FOR CALIFORNIA DEPARTMENT OF FISH AND
WILDLIFE



Jeffrey R. Single, Ph.D.
Regional Manager – Central Region

3/12/14
Date

Figure 1

Map of Project Locations

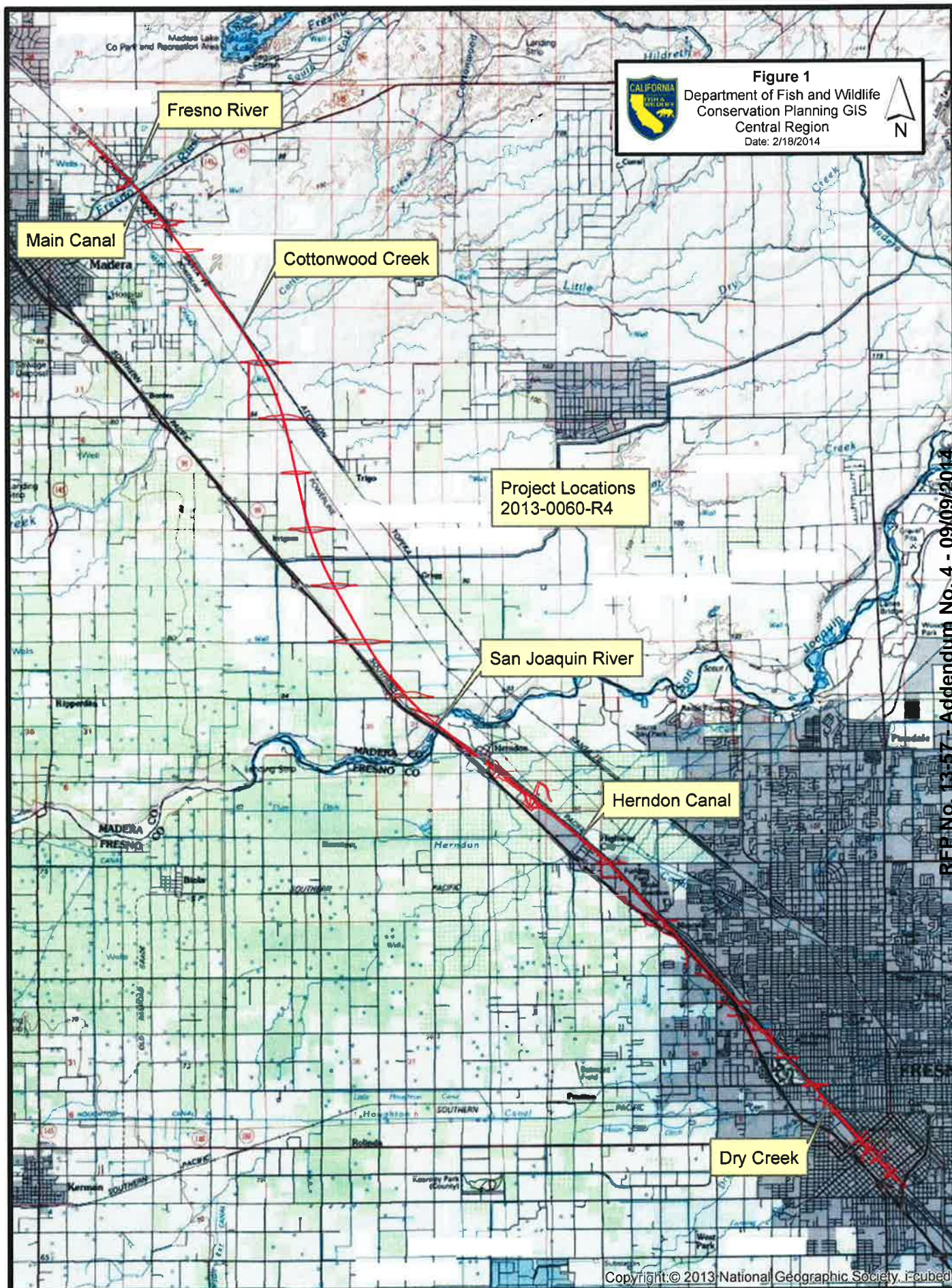


Figure 1
Department of Fish and Wildlife
Conservation Planning GIS
Central Region
Date: 2/18/2014

0 1 2 3 Miles

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Figure 2

Map of Construction Footprint at Fresno River and Main Canal

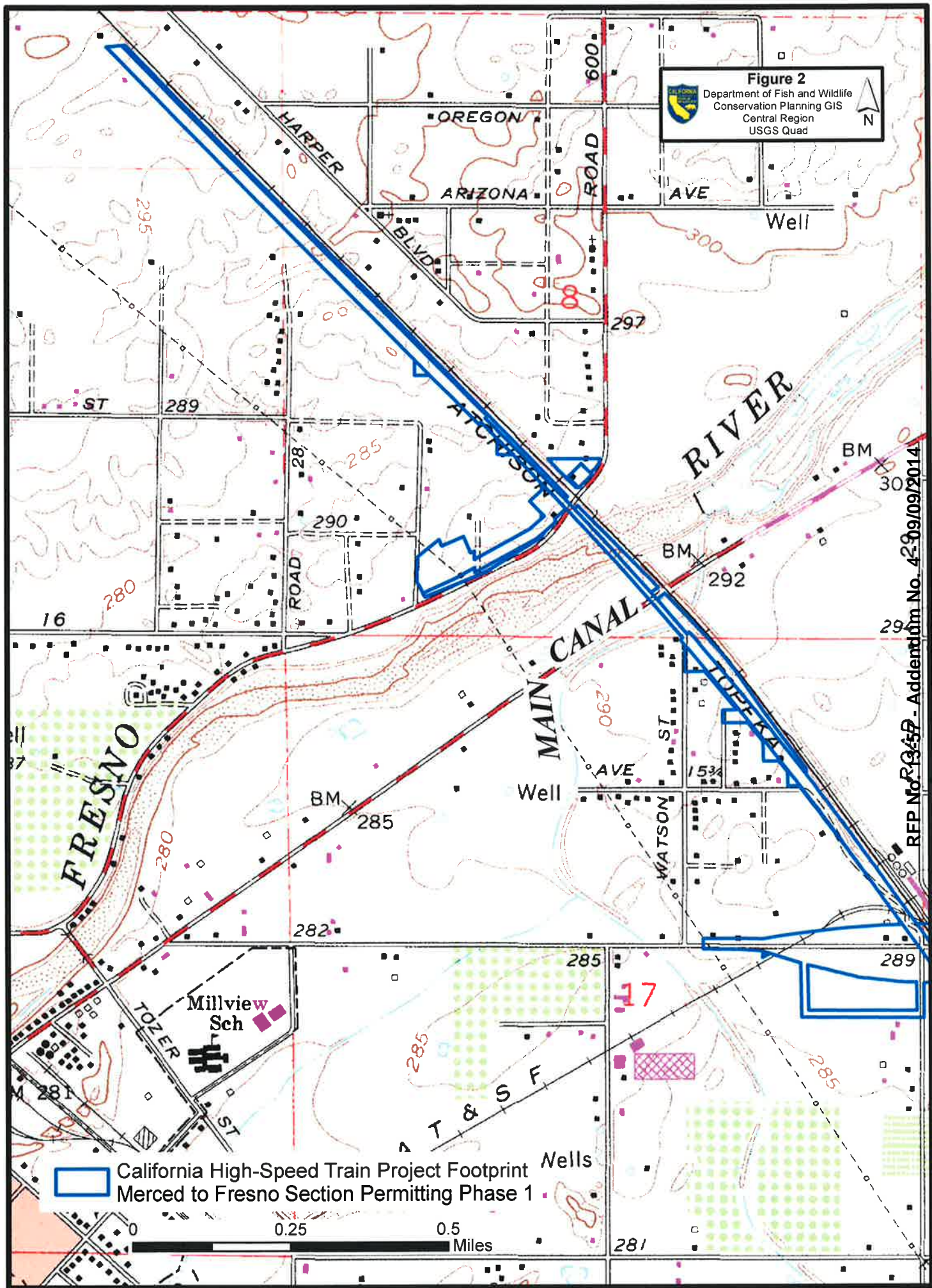
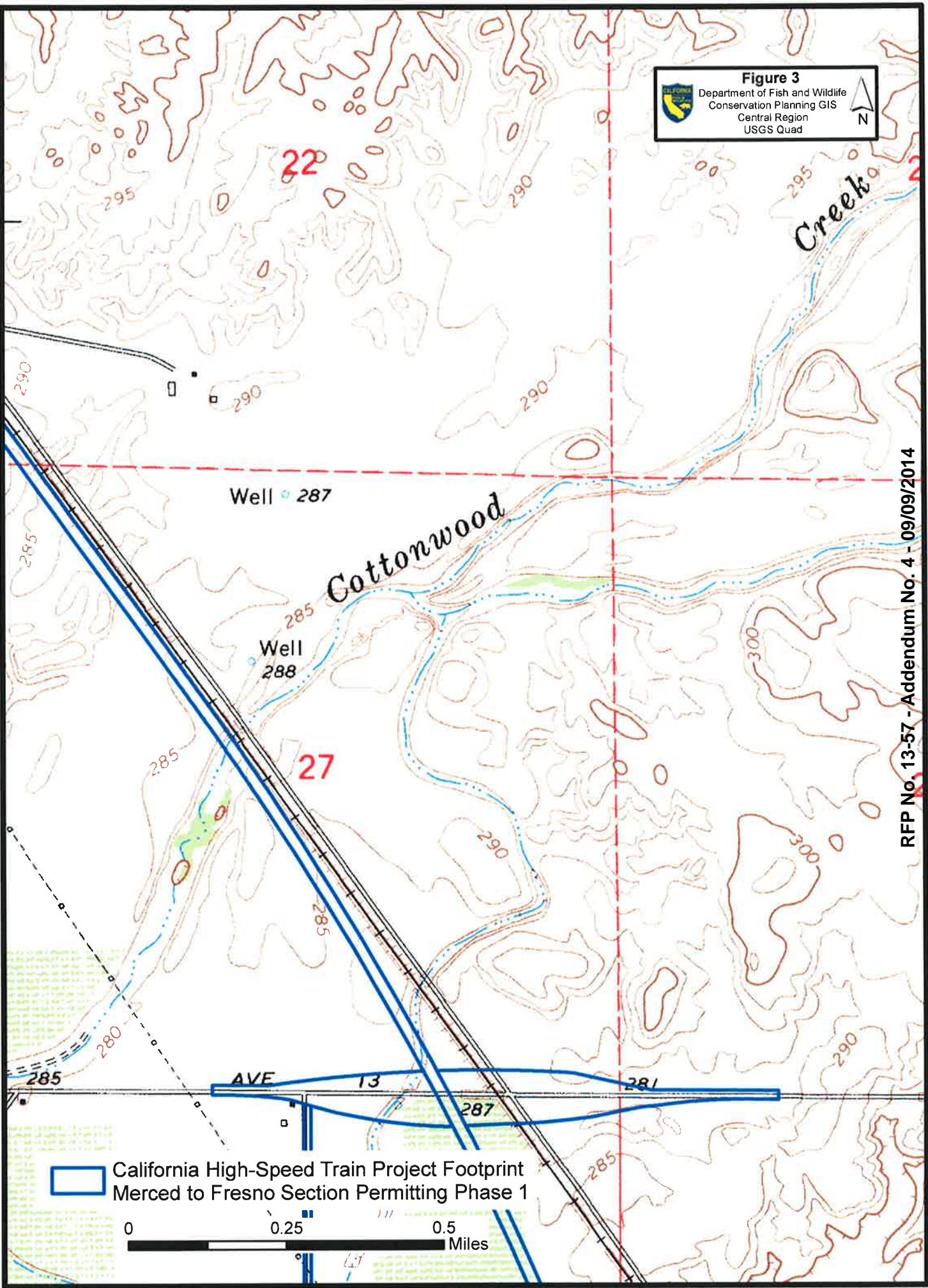


Figure 3

Map of Construction Footprint at Cottonwood Creek

Figure 3
 Department of Fish and Wildlife
 Conservation Planning GIS
 Central Region
 USGS Quad



RFP No. 13-57 - Addendum No. 4 - 09/09/2014

Figure 4

Map of Construction Footprint at San Joaquin River

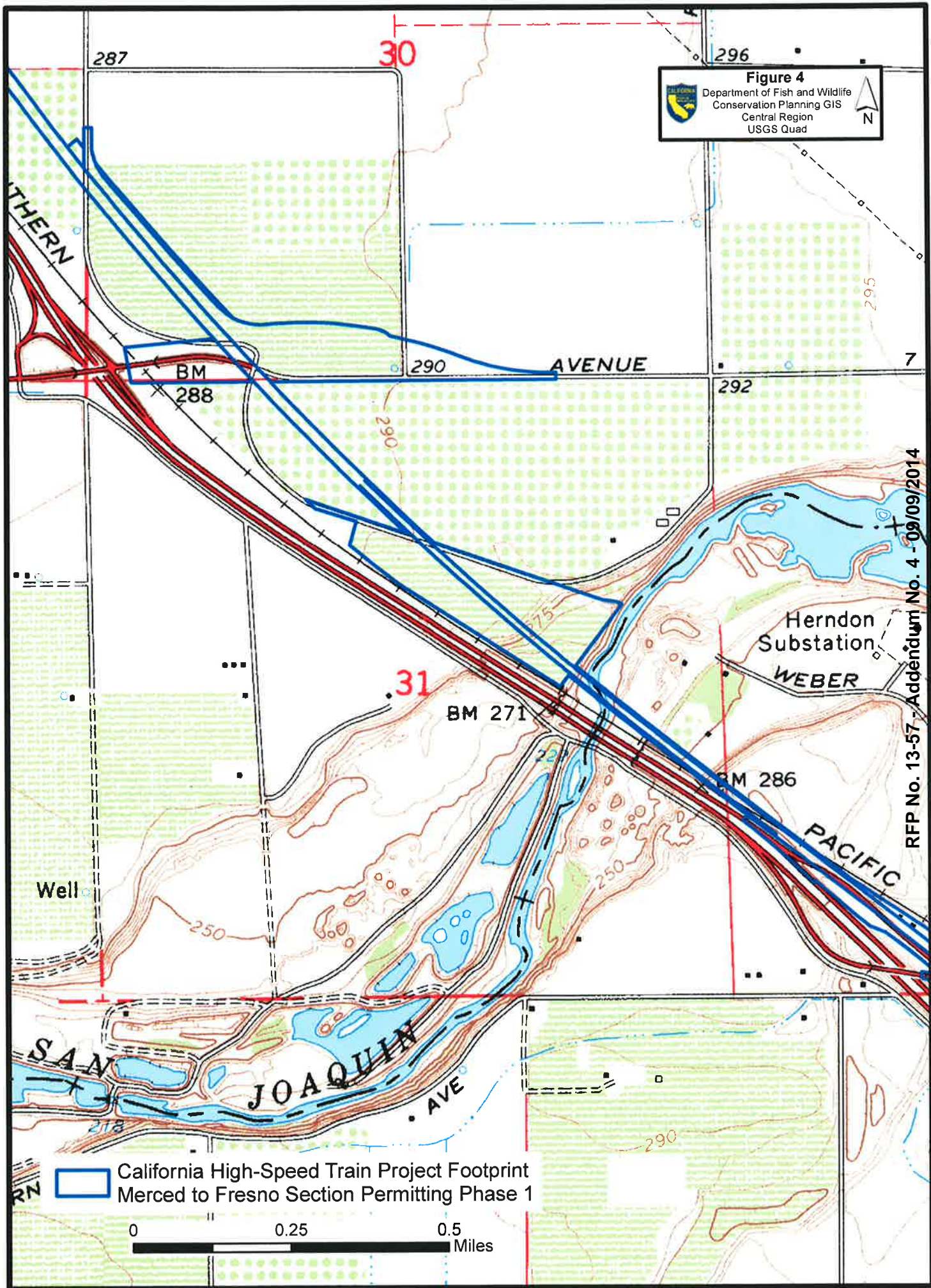
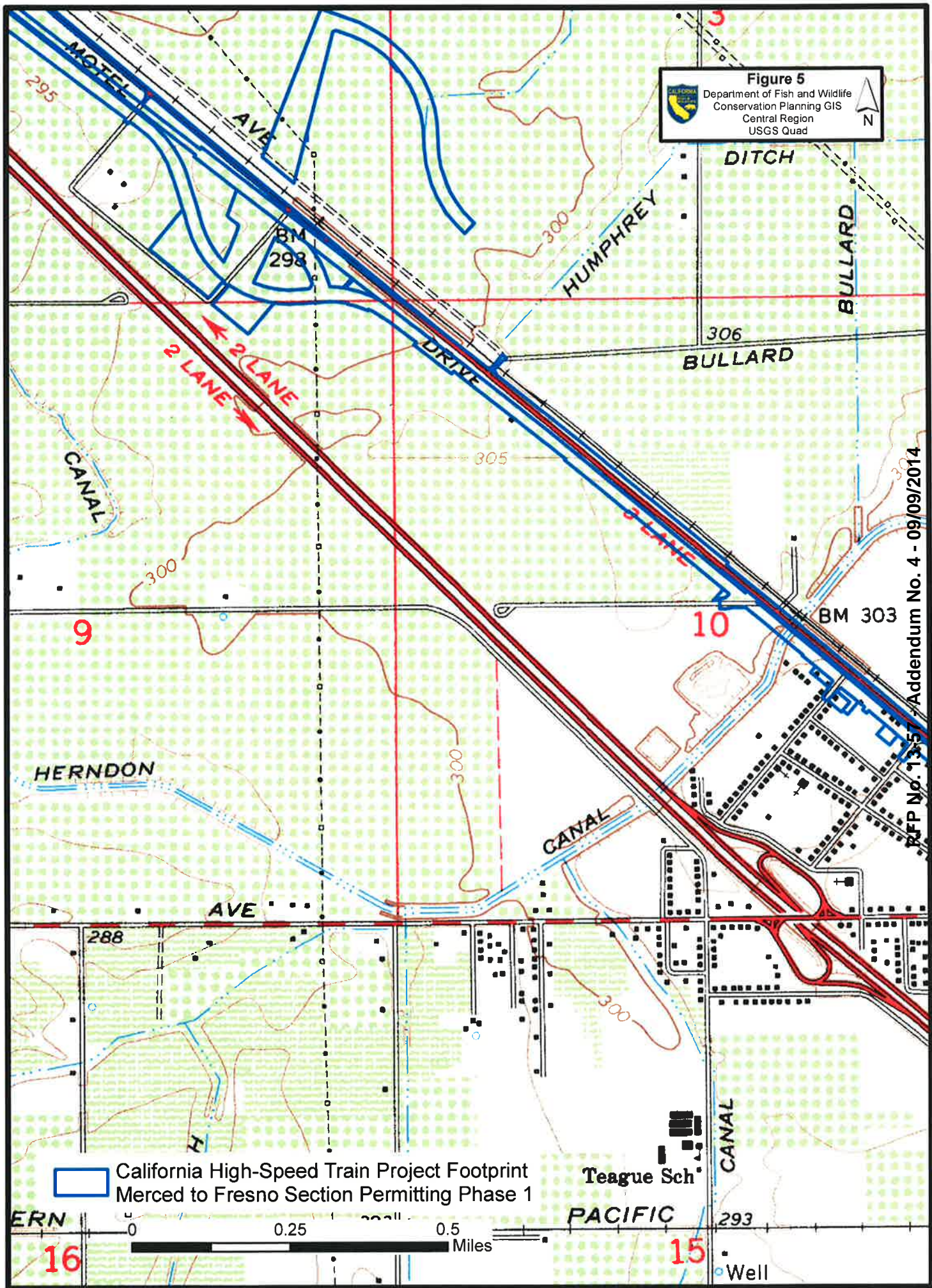


Figure 5

Map of Construction Footprint at Herndon Canal

Figure 5
 Department of Fish and Wildlife
 Conservation Planning GIS
 Central Region
 USGS Quad



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Figure 6

Map of Construction Footprint at Dry Creek Canal

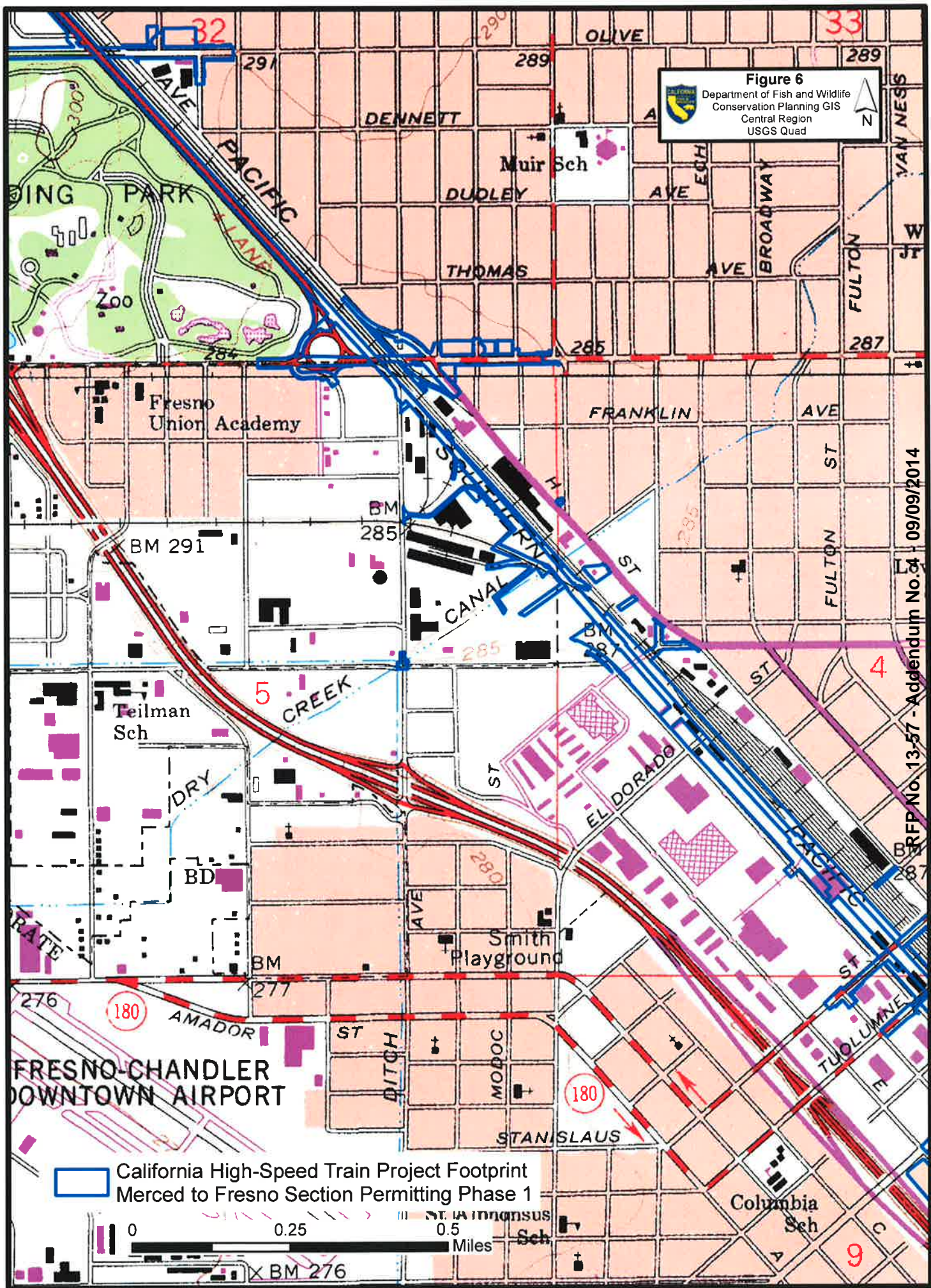
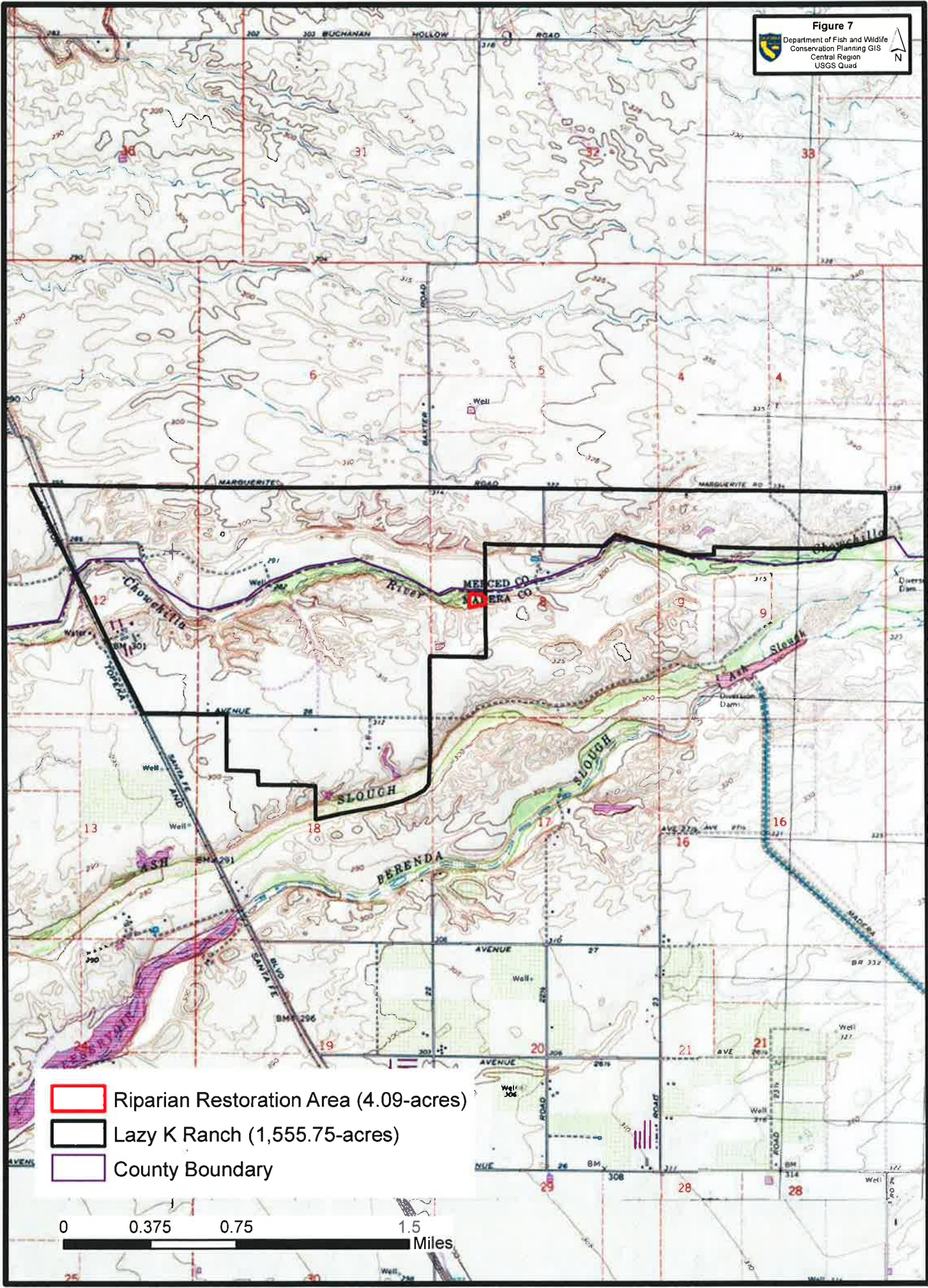


Figure 7

Map Showing Location
of Riparian Restoration
on Chowchilla River

Figure 7
 Department of Fish and Wildlife
 Conservation Planning GIS
 Central Region
 USGS Quad



- Riparian Restoration Area (4.09-acres)
- Lazy K Ranch (1,555.75-acres)
- County Boundary

Attachment 1

Subnotification Form

FOR DEPARTMENT USE ONLY				
Date Received	Amount Received	Amount Due	Date Complete	Subnotification No.
	\$	Pursuant to most recent fee schedule: http://www.dfg.ca.gov/habcon/1600/forms.html \$		1600-2013-0060-R4-

STATE OF CALIFORNIA
DEPARTMENT OF FISH AND WILDLIFE
SUBNOTIFICATION OF STREAMBED ALTERATION
California High-Speed Train Project
Merced to Fresno Section – Permitting Phase 1
Master Streambed Alteration Agreement

This subnotification form is being submitted in accordance with the State of California Department of Fish and Wildlife (CDFW) Master Streambed Alteration Agreement number 1600-2013-0060-R4, for Permitting Phase 1 of the Merced to Fresno Section of the California High-Speed Train Project, which states that prior to initiating any activities under the Agreement, notification to CDFW shall be given on an individual project basis through the use of a Subnotification Form.

Complete EACH field, unless otherwise indicated, following the enclosed instructions, and submit ALL required enclosures. Attach additional pages if necessary.

1. PERMITTEE PROPOSING PROJECT

Representative			
Business/Agency	California High-Speed Rail Authority		
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

2. CONTACT PERSON (Complete only if different from Permittee representative. Contact person receives all correspondence)

Name			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

3. PROJECT NAME AND TERM

A. Project Name				
B. Project Term		C. Seasonal Work Period		D. Number of Work Days
Beginning (year)	Ending (year)	Start Date (month/day)	End Date (month/day)	

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO SECTION - PERMITTING PHASE 1
SUBNOTIFICATION OF STREAMBED ALTERATION

4. TYPE OF SUBNOTIFICATION (select one):

Construction	Maintenance	Restoration
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. PROJECT LOCATION

A. Address or description of project location.

(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)

☐ Continued on additional page(s)

B. Stream affected by the project.

C. County

D. USGS 7.5 Minute Quad Map Name

E. Township

F. Range

G. Section

H. ¼ Section

☐ Continued on additional page(s)

I. Meridian (check one)

Mt. Diablo

J. Assessor's Parcel Number(s)

☐ Continued on additional page(s)

K. Coordinates (If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)

Latitude/Longitude	Latitude:	Longitude:	
	<input type="checkbox"/> Degrees/Minutes/Seconds	<input type="checkbox"/> Decimal Degrees	<input type="checkbox"/> Decimal Minutes
UTM	Easting:	Northing:	<input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11
Datum used for Latitude/Longitude or UTM		<input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83 or WGS 84	

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO SECTION - PERMITTING PHASE 1
SUBNOTIFICATION OF STREAMBED ALTERATION

6. PROJECT CATEGORY AND WORK TYPE (Check each box that applies)

COVERED ACTIVITY	Construction Activities	Maintenance Activities	Restoration Activities
Access Roads	<input type="checkbox"/>		
Bank stabilization, including fill material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge - new	<input type="checkbox"/>		
Bridge - replacement	<input type="checkbox"/>		
Culvert- new	<input type="checkbox"/>		
Culvert - replacement	<input type="checkbox"/>		
Erosion control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Excavation	<input type="checkbox"/>		<input type="checkbox"/>
Geotechnical surveys and testing	<input type="checkbox"/>		
Grading cut and fill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Horizontal Directional Drilling	<input type="checkbox"/>		
Installation of access-restricted fencing	<input type="checkbox"/>		
Planting of native plant species			<input type="checkbox"/>
Removal of trash or debris		<input type="checkbox"/>	
Removal or trimming of nonnative plant species			<input type="checkbox"/>
Removal or trimming of vegetation	<input type="checkbox"/>	<input type="checkbox"/>	
Sediment removal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seismic refraction	<input type="checkbox"/>		
Storm drain outfall structure	<input type="checkbox"/>		
Stream diversions and dewatering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tunneling	<input type="checkbox"/>		
Trenching	<input type="checkbox"/>		
Trenching for irrigation			<input type="checkbox"/>
Trimming of native vegetation for cuttings to be planted			<input type="checkbox"/>
Utility crossing, new	<input type="checkbox"/>		
Utility crossings, relocation	<input type="checkbox"/>		
Vegetation clearing and grubbing	<input type="checkbox"/>		<input type="checkbox"/>
Wildlife exclusion fencing	<input type="checkbox"/>		

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO SECTION - PERMITTING PHASE 1
SUBNOTIFICATION OF STREAMBED ALTERATION

7. PROJECT DESCRIPTION

A. Describe the project in detail, and include photographs of the project location and immediate surrounding area.

- Include information about all structures (e.g., rip-rap, culvert) that will be placed, built, or completed in or near the stream, including size, material, and proposed methods of installation..
- Specify the type and volume of materials that will be used.

Also enclose final site plans and maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.

☐ Continued on additional page(s)

B. Specify the equipment and machinery that will be used to complete the project.

☐ Continued on additional page(s)

C. Will water be present during the proposed work period (specified in box 3.C) in the stream, river, or lake (specified in box 4.B)?

☐ Yes ☐ No (*Skip to box 8*)

D. Will the proposed project require work in the wetted portion of the channel?

☐ Yes (*Enclose a Diversion or Dewatering Plan*)

☐ No

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO SECTION - PERMITTING PHASE 1
SUBNOTIFICATION OF STREAMBED ALTERATION

8. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the stream and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres), and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

☐ Continued on additional page(s)

B. Will the project affect any vegetation? ☐ Yes (Complete the tables below) ☐ No

Vegetation Type	Temporary Impact	Permanent Impact
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)

☐ Continued on additional page(s)

C. Specify the acreage of impacts to habitats in CDFW jurisdictional areas resulting from Construction Activities, as listed in the Master Streambed Alteration Agreement, Table 2.

Water Body Type	Permanent Impacts (Acres)	Temporary Impacts (Acres)

☐ Continued on additional page(s)

D. List the special status animal or plant species known to be or potentially present on or near the project site.

☐ Continued on additional page(s)

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO SECTION - PERMITTING PHASE 1
SUBNOTIFICATION OF STREAMBED ALTERATION

E. List the EIR/EIS Biological Resources Mitigation Measures that pertain to the species listed in Box 11.D.

☐ Continued on additional page(s)

F. Are additional Protective Measures proposed to protect fish and wildlife resources?

☐ Yes (Enclose additional Protective Measures) ☐ No

G. Has a biological study been completed for the project site?

☐ Yes (Enclose the biological study) ☐ No

H. Will the project result in the removal of trees or shrubs 4 inches in diameter in breast height or greater from the Fresno River, Main Canal, or Cottonwood Creek site?

☐ Yes (Enclose a Revegetation Plan) ☐ No

I. Will the Project result in exposed slopes or other bare areas?

☐ Yes (Enclose a Seed Mixture) ☐ No

J. Has a hydrological study been completed for the project or project site?

☐ Yes (Enclose the hydrological study) ☐ No

Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) is required for projects installing structures or other constructed features.

K. Is fish rescue necessary for dewatering the Work Site?

☐ Yes (Enclose a Fish Rescue Plan) ☐ No

L. Enclose an Emergency Response Plan for the project.

M. Is Horizontal Directional Drilling Proposed?

☐ Yes (Enclose a Frac-Out Contingency Plan) ☐ No

9. PERMITS

List any local, state, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

A. _____

☐ Applied ☐ Issued

B. _____

☐ Applied ☐ Issued

C. _____

☐ Applied ☐ Issued

D. _____

☐ Applied ☐ Issued

☐ Continued on additional page(s)

RFP No. 13-57 - Addendum No. 4 - 09/09/2014

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO SECTION - PERMITTING PHASE 1
SUBNOTIFICATION OF STREAMBED ALTERATION

10. SITE INSPECTION

Check one box only.

- ☐ In the event CDFW determines that a site inspection is necessary, I hereby authorize a CDFW representative to enter the property where the project described in this Subnotification will take place at any reasonable time, and hereby certify that I am authorized to grant CDFW such entry.
- ☐ I request CDFW to first contact (*insert name*) _____
at (*insert telephone number*) _____ to schedule a date and time to enter the property where the project described in this Subnotification will take place. I understand that delays may affect CDFW's determination as to whether this Subnotification is complete or is consistent with the Master Streambed Alteration Agreement.

11. DIGITAL FORMAT

Is any of the information included as part of the Subnotification available in digital format (i.e., CD, DVD, etc.)?

- ☐ Yes (Please enclose the information via digital media with the completed Subnotification form)
- ☐ No

12. SIGNATURE

I hereby certify that to the best of my knowledge the information in this Subnotification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this Subnotification is found to be untrue or incorrect, CDFW may suspend processing this Subnotification or suspend or revoke the Master Streambed Alteration Agreement. I understand also that if any information in this Subnotification is found to be untrue or incorrect and the project described in this notification has already begun, Permittee may be subject to civil or criminal prosecution. I understand that this Subnotification applies only to the project described herein and that Permittee may be subject to civil or criminal prosecution for undertaking any project not described herein unless CDFW has been separately notified of that project in a Subnotification or otherwise in accordance with Fish and Game Code section 1602.

Signature of Permittee's Authorized Employee Representative

Date

Print Name

RFP No. 13-57 - Addendum No. 4 - 09/09/2014

Attachment 2

Mitigation, Monitoring, and Reporting Program

Attachment 2

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

CALIFORNIA ENDANGERED SPECIES ACT INCIDENTAL TAKE PERMIT NO. 2081-2013-025-04

MASTER STREAMBED ALTERATION AGREEMENT NO. 1600-2013-0060-R4

PERMITTEE: California High-Speed Rail Authority

PROJECT: California High-Speed Train Project Merced to
Fresno Section Permitting Phase 1

PURPOSE OF THE MMRP

The purpose of this MMRP is to ensure that the impact minimization and mitigation measures required by the Department of Fish and Wildlife (CDFW) for the above-referenced Project are properly implemented, and thereby to ensure compliance with section 2081(b) of the Fish and Game Code and section 21081.6 of the Public Resources Code. A table summarizing the mitigation measures required by CDFW is attached. This table is a tool for use in monitoring and reporting on implementation of mitigation measures, but the descriptions in the table do not supersede the mitigation measures set forth in the California Incidental Take Permit (ITP) and in attachments to the ITP, or the measures set forth in the Master Streambed Alteration Agreement (MSAA) and in attachments to the MSAA, and the omission of a permit requirement from the attached table does not relieve the Permittee of the obligation to ensure the requirement is performed.

OBLIGATIONS OF PERMITTEE

Mitigation measures must be implemented within the time periods indicated in the table that appears below. Permittee has the primary responsibility for monitoring compliance with all mitigation measures and for reporting to CDFW on the progress in implementing those measures. These monitoring and reporting requirements are set forth in the ITP itself and are summarized at the front of the attached table.

VERIFICATION OF COMPLIANCE, EFFECTIVENESS

CDFW may, at its sole discretion, verify compliance with any mitigation measure or independently assess the effectiveness of any mitigation measure.

TABLE OF MITIGATION MEASURES

The following items are identified for each mitigation measure: Mitigation Measure/Protective Measure, Source, Implementation Schedule, Responsible Party, and Status/Date/Initials. The Mitigation Measure/Protective Measure column summarizes the mitigation requirements of the ITP and MSAA. The Source column identifies the ITP or MSAA condition that sets forth the measure. The Implementation Schedule column shows the date or phase when each measure will be implemented. The Responsible Party column identifies the person or agency that is primarily responsible for implementing the measure. For Section I of this MMRP, the Status/Date/Initials column shall be completed by the Permittee during preparation of each Status Report and the Final Mitigation Report, and must identify the implementation status of each mitigation measure, the date that status was determined, and the initials of the person determining the status. For Section II of this MMRP, the Status/Date/Initials column shall be completed by the Permittee for each Subnotification during preparation of each Annual Report and Four-Year Status Report. Also for Section II of the MMRP, additional Protective Measures shall be added if identified during the Subnotification approval process.

SECTION I – Incidental Take Permit

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
BEFORE DISTURBING SOIL OR VEGETATION					
1	<u>Designated Representative.</u> Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with the ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of the ITP.	ITP Condition # 6.1	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
2	<u>Designated Biologist(s).</u> Permittee shall submit to CDFW in writing the name(s), qualifications, business address(es), and contact information of a biological monitor(s) (Designated Biologist(s)) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist(s) are knowledgeable and experienced in the biology, natural history, collecting, and handling of the Covered Species. The Designated Biologist(s) shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist(s) in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist(s) must be changed.	ITP Condition # 6.2	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee and Designated Biologist(s)	
3	<u>Designated Biologist Authority.</u> To ensure compliance with the Conditions of Approval of the ITP, the Designated Biologist(s) shall have authority to immediately stop any activity that does not comply with the ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.	ITP Condition # 6.3	Before commencing ground- or vegetation-disturbing activities / Entire Project	Designated Biologist(s)	
4	<u>Education Program.</u> Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist(s) that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in the ITP. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees that will be conducting work in the Project Area.	ITP Condition # 6.4	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee and Designated Biologist(s)	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
5	<u>Trash Abatement.</u> Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed at least once a week to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.	ITP Condition # 6.6	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
6	<u>Delineation of Property Boundaries.</u> Before starting Covered Activities within the Project Area, Permittee shall clearly delineate the boundaries of the applicable Work Area with fencing, stakes, or flags. Permittee shall restrict all Covered Activities to within the fenced, staked, or flagged areas. Permittee shall maintain all fencing, stakes, and flags until the completion of Covered Activities in that Work Area. The Work Area is defined as the discrete zone(s) within the Project Area where Covered Activities will actively occur.	ITP Condition # 6.10	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
7	<u>Notification Before Commencement.</u> The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities in each Work Area and shall document compliance with all pre-Project Conditions of Approval before starting such Covered Activities.	ITP Condition # 7.1	Before commencing ground- or vegetation-disturbing activities / Entire Project	Designated Representative	
8	<u>Notification Before Commencement at the Mitigation Site.</u> The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities at the Mitigation Site and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities	ITP Condition # 8.18	Before commencing ground- or vegetation-disturbing activities	Designated Representative	
9	<u>Cost Estimates.</u> CDFW has estimated the cost of acquisition, protection, and perpetual management of the HM lands as follows: <ul style="list-style-type: none"> Land acquisition costs for HM lands identified in Condition of Approval 9.3, estimated at \$5,025.93/acre for 234 acres: \$1,176,067.62. Land acquisitions costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements; Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 9.3.5, estimated at \$365,047.93; Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at \$56,020.84; Long-term management funding as described in Condition of Approval 9.4, estimated at \$5,806.00/acre for 234 acres: \$1,358,604.00. Long term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management. Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW as described in Condition of Approval 9.5, estimated at \$12,000.00. 	ITP Condition # 9.1	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
10	<u>Covered Species Credits.</u> Permittee shall purchase 234 acres of Covered Species credits from the CDFW-approved Dutchman Creek Mitigation Bank prior to initiating Covered Activities, or no later than 18 months from the start of Project construction, as documented in the Notification Before Commencement submitted pursuant to Condition of Approval 7.1 if Security is provided pursuant to Condition of Approval 10.	ITP Condition # 9.2	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
11	<p>OR:</p> <p><u>Habitat Acquisition and Protection.</u> To provide for the acquisition and perpetual protection and management of the HM lands, the Permittee shall:</p> <p><u>Fee Title/Conservation Easement.</u> Transfer fee title to the HM lands to CDFW pursuant to terms approved in writing by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a governmental entity, special district, non-profit organization, for-profit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW does not hold the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The Permittee shall obtain CDFW written approval of any conservation easement before its execution or recordation. No conservation easement shall be approved by CDFW unless it complies with Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e);</p>	ITP Condition # 9.3.1	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
12	<u>HM Lands Approval.</u> Obtain CDFW written approval of the HM lands before acquisition and/or transfer of the land by submitting, at least three months before acquisition and/or transfer of the HM lands, a formal Proposed Lands for Acquisition Form (see Attachment 3B) identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species;	ITP Condition # 9.3.2	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
13	<u>HM Lands Documentation.</u> Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents (see Attachment 3A). All documents conveying the HM lands and all conditions of title are subject to the approval of CDFW, and if applicable, the Wildlife Conservation Board and the Department of General Services;	ITP Condition # 9.3.3	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
14	<u>Land Manager.</u> Designate both an interim and long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. Documents related to land management shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the mitigation land, CDFW will also act as both the interim and long-term land manager unless otherwise specified.	ITP Condition # 9.3.4	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
15	<u>Start-up Activities.</u> Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval (see http://www.dfg.ca.gov/habcon/conplan/mitbank/); (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring GIS data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage.	ITP Condition # 9.3.5	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
16	<u>Interim Management (Initial and Capital).</u> Provide for the interim management of the HM lands. The Permittee shall ensure that the interim land manager implements the interim management of the HM lands as described in the final management plan and conservation easement approved by CDFW. The interim management period shall be a minimum of three years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected management following start-up activities. Interim management period activities described in the final management plan shall include fence repair, continuing trash removal, site monitoring, and vegetation and invasive species management. Permittee shall either (1) provide a security to CDFW for the minimum of three years of interim management that the land owner, Permittee, or land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with written instructions approved in advance in writing by CDFW to pay the land manager annually in advance, or (3) establish a short-term enhancement account with CDFW or a CDFW-approved entity for payment to the land manager.	ITP Condition # 9.3.6	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
17	<p>Endowment Fund. If the Permittee will permanently protect and perpetually manage compensatory habitat as described in Condition of Approval 9.3, The Permittee shall ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in the ITP, the conservation easement, and the final management plan approved by CDFW. After obtaining CDFW approval of the HM lands, Permittee shall provide long term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plan(s) required by Condition of Approval 9.3.5. Endowment as used in the ITP shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by the ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.</p> <p>After the interim management period, Permittee shall ensure that the designated long-term land manager implements the management and monitoring of the HM lands according to the final management plan. The long-term land manager shall be obligated to manage and monitor the HM lands in perpetuity to preserve their conservation values in accordance with the ITP, the conservation easement, and the final management plan. Such activities shall be funded through the Endowment.</p>	ITP Condition # 9.4.	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
18	<p>Identify an Endowment Manager. The Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended. Permittee shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e). Within 30 days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081(b)(4) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the 30 day period, the proposal shall be deemed consistent with Section 2081(b)(4).;</p>	ITP Condition # 9.4.1	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
19	<p><u>Calculate the Endowment Funds Deposit.</u> After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare a Property Analysis Record (PAR) or PAR-equivalent analysis (hereinafter "PAR") to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). The Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Manager.</p> <ul style="list-style-type: none"> • <u>Capitalization Rate and Fees.</u> Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees. • <u>Endowment Buffers/Assumptions.</u> Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment: <ul style="list-style-type: none"> ○ <u>Ten Percent Contingency.</u> A ten percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events. ○ <u>Three Years Delayed Spending.</u> The endowment shall be established assuming spending will not occur for the first three years after full funding. ○ <u>Non-annualized Expenses.</u> For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Manager and CDFW. 	ITP Condition # 9.4.2	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
20	<p><u>Transfer Long-term Endowment Funds.</u> Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount. The approved Endowment Manager may pool the Endowment with other endowments for the operation, management, and protection of HM lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment. The Endowment Manager shall, at all times, hold and manage the Endowment in compliance with the ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.</p>	ITP Condition # 9.4.3	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
21	<p><u>Reimburse CDFW.</u> Permittee shall reimburse CDFW for all reasonable expenses incurred by CDFW such as transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.</p>	ITP Condition # 9.5	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
22	<p>The Permittee may proceed with Covered Activities only after the Permittee has ensured funding (Security) to complete any activity required by Condition of Approval 9 that has not been completed before Covered Activities begin. Permittee shall provide Security as follows:</p> <p><u>Security Amount.</u> The Security shall be in the amount of \$2,967,740.39. This amount is based on the cost estimates identified in Condition of Approval 9.1.</p> <p><u>Security Form.</u> The Security shall be in the form of an irrevocable letter of credit (see Attachment 4) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel.</p> <p><u>Security Timeline.</u> The Security shall be provided to CDFW before Covered Activities begin or within 180 days after the effective date of the ITP, whichever occurs first.</p> <p><u>Security Holder.</u> The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW.</p> <p><u>Security Transmittal.</u> If CDFW holds the Security, Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 5) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other.</p> <p><u>Security Drawing.</u> If CDFW holds the Security, it shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of the ITP.</p> <p><u>Security Release.</u> If CDFW holds the Security, it (or any portion of the Security then remaining) shall be released to the Permittee after CDFW has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by:</p> <ul style="list-style-type: none"> • Written documentation of the acquisition of the HM lands; • Copies of all executed and recorded conservation easements; • Written confirmation from the approved Endowment Manager of its receipt of the full Endowment; and • Timely submission of all required reports. <p>Even if Security is provided under this Condition of Approval 10, the Permittee must complete the required acquisition, protection and transfer of all HM lands and record any required conservation easements no later than 18 months from the start of Project construction, as documented in the Notification Before Commencement submitted pursuant to Condition of Approval 7.1. CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.</p>	ITP Condition # 10	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

DURING CONSTRUCTION						
23	<u>Construction Monitoring Notebook.</u> The Designated Biologist(s) shall maintain a construction-monitoring notebook on-site throughout the construction period, which shall include a copy of the ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring notebook is available for review at the Project site upon request by CDFW.	ITP Condition # 6.5	Entire Project	Permittee and Designated Biologist(s)		
24	<u>Prohibition of Dogs and Firearms.</u> Firearms and domestic dogs shall be prohibited in the phase of the Project Area under construction as well as from site access routes during construction and development of the Project, except those firearms and domestic dogs that are in the possession of authorized security personnel or local, state, or federal law enforcement officials.	ITP Condition # 6.7	Entire Project	Permittee, security personnel, and law enforcement		
25	<u>Dust Control.</u> Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist(s). Permittee shall keep the amount of water used to the minimum amount needed, and shall not allow water to form puddles.	ITP Condition # 6.8	Entire Project	Permittee		
26	<u>Erosion Control Materials.</u> Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting (erosion control matting) or similar material, in potential Covered Species' habitat.	ITP Condition # 6.9	Entire Project	Permittee		
27	<u>Delineation of Habitat.</u> Permittee shall clearly delineate habitat of the Covered Species within the Project Area with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat.	ITP Condition # 6.11	Entire Project	Permittee		
28	<u>Project Access.</u> Project-related personnel shall access the Project Area using existing routes, or routes identified in the Project Description and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas. Permittee shall ensure that vehicle speeds do not exceed 15 mph to avoid Covered Species on or traversing the roads. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before carrying out such an activity. CDFW may require an amendment to the ITP, among other reasons, if additional take of Covered Species will occur as a result of Project modification. Permittee may consider implementing additional avoidance measures, such as posting signs and installing physical barriers as necessary to prevent unauthorized off-road vehicle/equipment use. Permittee shall ensure that new and existing roads that are planned for either construction or widening do not extend beyond the boundary of the Construction Footprint. Permittee shall ensure that all vehicles passing or turning around shall do so within the Construction Footprint or in previously disturbed areas. Where new access is required and authorized by CDFW outside of existing roads or the Project Area, the route shall be clearly marked by the Designated Biologist(s) (i.e., flagged and/or staked) prior to the onset of construction. If unauthorized off-road vehicle/equipment use occurs, CDFW may halt continued operations until the violation is remedied.	ITP Condition # 6.12	Entire Project	Permittee, Designated Biologist(s), and Project-related personnel		

29	<u>Staging Areas.</u> Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for as described in Condition of Approval 6.12 of the ITP.	ITP Condition # 6.13	Entire Project	Permittee	
30	<u>Hazardous Waste.</u> Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products offsite.	ITP Condition # 6.14	Entire Project	Permittee	
31	<u>CDFW Access.</u> Permittee shall provide CDFW staff with reasonable access to the Project and mitigation lands under Permittee control, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in the ITP.	ITP Condition # 6.15	Entire Project	Permittee	
32	<u>Notification of Non-compliance.</u> The Designated Representative shall immediately notify CDFW in writing if he or she determines that the Permittee is not in compliance with any Condition of Approval of the ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in the ITP and/or this MMRP. The Designated Representative shall report any non-compliance with the ITP to CDFW within 24 hours.	ITP Condition # 7.2	Entire Project	Designated Representative	
33	<u>Compliance Monitoring.</u> The Designated Biologist(s) shall be on-site daily at each Work Area within the Project Area when vegetation and soil disturbance Covered Activities occur. The Designated Biologist(s) shall conduct compliance inspections to: (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of the ITP; (4) check all exclusion zones; and (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. During initial vegetation and soil disturbance, the Designated Biologist(s) shall conduct compliance inspections continuously within each of the Work Area(s) where Covered Activities are occurring. After initial vegetation and soil disturbance, the Designated Biologist(s) shall conduct compliance inspections a minimum of once per day within each of the Work Area(s) where Covered Activities are occurring. The Designated Representative or Designated Biologist(s) shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by the ITP. The Designated Biologist(s) shall conduct compliance inspections a minimum of monthly during periods of inactivity and after clearing, grubbing, and grading are completed.	ITP Condition # 7.3	Entire Project	Designated Biologist(s) and Designated Representative	

34	<p><u>Tracking Suitable Habitat Feature Disturbances, Map Updating, and Reporting.</u> Permittee shall maintain Geographic Information System (GIS) shapefile layers and associated maps depicting: 1) mapped areas of all land disturbances within the Construction Footprint; and 2) mapped areas of disturbed identified habitat features suitable for Covered Species (see below for habitat features) within the Construction Footprint (as depicted in the Baseline Map Book, Exhibit 5, Baseline Maps 1 through 54 and generated from the metadata provided by the Permittee in March 2013). Permittee shall maintain the GIS layers and metadata for those maps and shall update the GIS layers and maps if there are any new detections of Covered Species or their habitat feature. Within each Work Area of the Construction Footprint, Permittee shall track, in real time, acreages of identified habitat features suitable for Covered Species disturbed by Covered Activities. This tracking shall be maintained using a GIS format and include photo documentation of the habitat feature within a Work Area conducted no more than 14 days prior to initiation of Covered Activities. The photo documentation of each habitat feature shall include a minimum of four photos: one taken each from the North, South, East, and West and facing the habitat feature. There shall be separate photo documentation of each habitat feature suitable for Covered Species within a Work Area. Accordingly, if there are multiple habitat features in a Work Area, there will be multiple sets of photo documentation for that Work Area. The Permittee shall document the total disturbed acreage of habitat features for each Covered Species compiled from the real time tracking, and compare the documented disturbance in each Work Area to the Baseline Maps. Permittee shall provide GIS layers and the associated metadata to CDFW with the Monthly Compliance Report (see Condition of Approval 7.7). Permittee shall also maintain maps for each Covered Species separately, and shall include updates to any of the maps in the next successive Annual Status Report (see Condition of Approval 7.8). Permittee shall also provide up-to-date GIS layers of the identified habitat features suitable for Covered Species with the Monthly Compliance Report and a summation of disturbance of identified habitat features annually at the time of Annual Status Report submission. See related Conditions of Approval 8.33.2, 8.33.3, 8.34.2, 8.34.3 concerning mapping of the Wetland Restoration Area and Riparian Restoration Area.</p>	ITP Condition # 7.4	Entire Project	Permittee	
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35	<p>Permittee shall track the following suitable habitat features for the Covered Species:</p> <p><u>CTS Upland refugia</u></p> <ul style="list-style-type: none"> • California annual grassland • Pasture • Barren • Fallow field • Inactive agriculture • Ruderal <p><u>CTS Aquatic breeding</u></p> <ul style="list-style-type: none"> • Vernal pool • Open water • Seasonal wetland <p><u>SWHA breeding</u></p> <ul style="list-style-type: none"> • Riparian • Eucalyptus woodland <p><u>SWHA foraging</u></p> <ul style="list-style-type: none"> • California annual grassland • Pasture • Barren • Fallow field • Inactive agriculture • Ruderal • Field crops • Row crops • Irrigated hay crops 	ITP Condition # 7.4.1	Entire Project	Permittee	
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35	<u>SJKF denning, foraging, and/or dispersal</u> <ul style="list-style-type: none"> • California annual grassland • Pasture • Barren • Fallow field • Inactive agriculture • Ruderal • Field crops • Row crops • Irrigated hay crops 	ITP Condition # 7.4.1 (continued)	Entire Project	Permittee	
36	<u>Reporting Approved Maps.</u> Permittee shall document the cumulatively disturbed acreages of identified habitat features suitable for each Covered Species within the Construction Footprint, as well as acreages of identified habitat features anticipated to be disturbed over the succeeding 30 days, using the data maintained according to Condition of Approval 7.4. Permittee shall provide the information to CDFW with the Monthly Compliance Report.	ITP Condition # 7.5	Entire Project	Permittee	
37	<u>SJKF Corridor Monitoring.</u> Permittee shall implement a SJKF Corridor Monitoring Program to determine the use of dedicated wildlife crossings by SJKF. The Permittee shall submit to CDFW for approval a SJKF Corridor Monitoring Program Plan prior to initiating construction of the dedicated wildlife crossings. The SJKF Corridor Monitoring Program Plan shall include no less than five years of monitoring efforts to assist in determining the use of dedicated wildlife crossings and other potential crossing structures by SJKF. The SJKF Corridor Monitoring Program Plan shall commence as soon as the construction of the wildlife crossings is complete. The monitoring methodology may include use of trail cameras, track plates, or other methods to determine SJKF movement. Wildlife crossing construction activities shall not proceed until the SJKF Corridor Monitoring Program Plan has been approved in writing by CDFW's Regional Representative.	ITP Condition # 7.6	Entire Project	Permittee	

38	<p><u>Monthly Compliance Report.</u> For the duration of the Construction Footprint Activities and Lazy K Ranch Mitigation Site Activities, the Designated Representative or Designated Biologist(s) shall compile the observation and inspection records identified in Condition of Approval 7.3 into a Monthly Compliance Report and submit it to CDFW along with a copy of this MMRP table with notes showing the current implementation status of each mitigation measure. Monthly Compliance Reports shall also include: 1) an accounting of the number of acres that have been disturbed within the Project area, both for the prior month and a total since ITP issuance; 2) the cumulatively disturbed acreages of identified habitat features for each of the Covered Species within the Project Area, both for preceding 30 days and a total since ITP issuance; and 3) the acreages of identified habitat features anticipated to be disturbed over the succeeding 30 days; and 4) the up-to-date GIS layers, associated metadata, and photo documentation used to track acreages disturbed during Covered Activities and as identified in Conditions of Approval 7.4 and 7.5. Monthly Compliance Reports shall be submitted to CDFW's Regional Office no later than the 15th day of the month. The Monthly Compliance Report is due at the office listed in the Notices section of the ITP and via e-mail to CDFW's Regional Representative. At the time of the ITP's approval, the CDFW Regional Representative is Sarah Boogay (sarah.boogay@wildlife.ca.gov). CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.</p>	ITP Condition # 7.7	Entire Project	Permittee, Designated Representative, and Designated Biologist(s)	
39	<p><u>Annual Status Report.</u> Permittee shall provide CDFW with an Annual Status Report (ASR) no later than January 31st of every year beginning with issuance of the ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Monthly Compliance Reports for that year identified in Condition of Approval 7.7; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in this MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; (6) information about other Project impacts on the Covered Species; (7) updates to the mapped areas of all land disturbances and mapped areas of identified habitat features suitable for Covered Species within the Project Area in accordance with Condition of Approval 7.4 above; (8) a summary of findings from pre-construction surveys (e.g., number of times a Covered Species or a den, burrow, or nest was encountered, location, if avoidance was achieved, if not, what other measures were implemented); (9) beginning and ending dates of maintenance and emergency related and other Covered Activities undertaken during the reporting year; and (10) a summary of the cumulative status of the disturbed acreages of all land disturbances and identified habitat features for each of the Covered Species within the Project Area, both for the preceding twelve months and a total since ITP issuance, and the acreages of all land and identified habitat features anticipated to be disturbed over the succeeding twelve months in accordance with Conditions of Approval 7.4 and 7.5 above.</p>	ITP Condition # 7.8	Entire Project	Permittee	
40	<p><u>CNDDDB Observations.</u> The Designated Biologist(s) shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Designated Biologist(s) shall include copies of the submitted forms with the next Monthly Compliance Report or ASR, whichever is submitted first relative to the observation.</p>	ITP Condition # 7.9	Entire Project	Permittee and Designated Biologist(s)	

41	<u>Final Mitigation Report.</u> Within 30 days of ITP expiration, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist(s) shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Monthly Compliance Reports and all ASRs; (2) a copy of the table in this MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of the ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.	ITP Condition # 7.10	Entire Project	Permittee and Designated Biologist(s)	
42	<u>Notification of Take or Injury.</u> Permittee shall immediately notify the Designated Biologist(s) if a Covered Species is taken or injured by a Covered Activity, or if a Covered Species is otherwise found dead or injured within the Project Area or its vicinity. The Designated Biologist(s) or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (559) 243 4005. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send the CDFW Regional Representative a written report within <u>two</u> calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.	ITP Condition # 7.11	Entire Project	Permittee and Designated Biologist(s)	
Construction Footprint Activities					
43	<u>Conditions of Approval in the Construction Footprint.</u> Construction Footprint Activities shall implement all General Provisions set forth in Condition of Approval 6 and all Monitoring, Notification, and Reporting Provisions set forth in Condition of Approval 7 of the ITP.	ITP Condition # 8.1	Entire Project	Permittee	
44	<u>Equipment Fueling.</u> Mobile equipment fueling and maintenance shall occur at least 100 feet from identified habitat features suitable for Covered Species, as defined by Condition of Approval 7.5; the habitat features are subject to update. Fixed equipment fueling and maintenance areas, either permanently or temporarily fixed, shall be located at a distance of at least 100 feet from Covered Species habitat, and shall include fixed containment devices that will preclude fuel or other liquids from exiting the equipment fueling maintenance area in the event of a spill or leak. Sufficient spill containment and cleanup equipment shall be present at all mobile, temporary, and permanent equipment fueling locations.	ITP Condition # 8.2	Entire Project	Permittee	
45	<u>Lighting.</u> Permittee shall not use permanent or temporary, fixed, exterior lighting, including motion-triggered security lighting that casts light on Covered Species habitat beyond the Construction Footprint of Covered Activities between sunset and sunrise.	ITP Condition # 8.3	Entire Project	Permittee	

46	<u>Herbicide Use.</u> Permittee shall ensure that all herbicide use (mixing, application, and clean-up) is done by a licensed applicator in accordance with all applicable state, federal, and local regulations. Permittee shall only apply herbicide sprays via ground application when wind speed measures less than three mph. Permittee shall ensure all herbicide sprays utilized within and adjacent to identified habitat features suitable for Covered Species contain a dye (registered for aquatic use by the California Department of Pesticide Regulation, if warranted) to prevent overspray.	ITP Condition # 8.4	Entire Project	Permittee	
47	<u>Rodenticide Use.</u> Permittee shall prohibit the use of rodenticides in the Construction Footprint.	ITP Condition # 8.5	Entire Project	Permittee	
48	<u>Covered Species Observations.</u> At any time while engaged in Covered Activities, all workers shall inform the Designated Biologist(s) if a Covered Species is seen within or near the Work Area. All Covered Activities in the vicinity of the Covered Species, which could injure or kill the animal, shall cease until the Covered Species is moved by the Designated Biologist(s) or it moves from the Work Area of its own accord.	ITP Condition # 8.6	Entire Project	Designated Biologist(s)	
49	<u>Daily Entrapment Inspections.</u> The Designated Biologist(s) shall inspect all open holes, sumps, and trenches within each Work Area at the beginning, middle, and end of each day for trapped Covered Species. All trenches, holes, sumps, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope and that are between two- and eight feet deep shall be covered when workers or equipment are not actively working in the excavation, which includes cessation of work overnight, or shall have an escape ramp of earth or a non-slip material with a less than 1:1 (45 degree) slope. All trenches, holes, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope and greater than eight feet deep shall be covered when workers or equipment are not actively working in the excavation and at the end of each work day. To prevent inadvertent entrapment of Covered Species or any other animals, the Designated Biologist(s) shall oversee the covering of all excavated, trenches, holes, sumps, or other excavations with a greater than 1:1 (45 degree) slope of any depth with barrier material (such as hardware cloth) at the close of each working day such that Covered Species are unable to dig or squeeze under the barrier and become entrapped. The outer two feet of excavation cover shall conform to solid ground so that gaps do not occur between the cover and the ground and secured with soil staples or similar means to prevent gaps. Each morning, mid-day, the end of each day (including weekends and any other non-work days), and immediately before trenches, holes, sumps, or other excavations are back-filled, the Designated Biologist(s) shall thoroughly inspect them for trapped Covered Species. Trenches, holes, sumps, or other excavations that are covered long-term shall be inspected at the beginning of each working day to ensure inadvertent entrapment has not occurred. If any worker discovers that Covered Species have become trapped, Permittee shall cease all Covered Activities in the vicinity and notify the Designated Biologist(s) immediately. Project workers and the Designated Biologist(s) shall allow the Covered Species to escape unimpeded if possible before Covered Activities are allowed to continue, or, if the Covered Species is CTS, the Designated Biologist(s) shall capture and relocated the animal as per the CTS Salvage and Relocation Plan described in Condition of Approval 8.13.1.	ITP Condition # 8.7	Entire Project	Permittee and Designated Biologist(s)	

50	<u>Materials Inspection.</u> Workers shall thoroughly inspect for Covered Species in all construction pipe, culverts, or similar structures with a diameter of 7.6 centimeters (three inches) or greater that are stored for one or more overnight periods before the structure is subsequently moved, buried, or capped. If during inspection one of these animals is discovered inside the structure, workers shall notify the Designated Biologist(s) and allow the Covered Species to safely escape that section of the structure before moving and utilizing the structure.	ITP Condition # 8.8	Entire Project	Permittee and Designated Biologist(s)	
51	<u>Equipment Inspection.</u> Workers shall inspect for Covered Species under vehicles and equipment before the vehicles and equipment are moved. If a Covered Species is present, the worker shall notify the Designated Biologist(s) and wait for the Covered Species to move unimpeded to a safe location. Alternatively, the Permittee shall contact the Designated Biologist(s) to determine if the Designated Biologist(s) can safely move the Covered Species out of harm's way in compliance with the ITP.	ITP Condition # 8.9	Entire Project	Permittee and Designated Biologist(s)	
52	<u>Covered Species Injury.</u> If a Covered Species is injured as a result of Project related activities, the Designated Biologist(s) shall immediately take it to a CDFW approved wildlife rehabilitation or veterinary facility that routinely evaluates and treats the injured Covered Species. Permittee shall identify the facility before starting Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. Permittee shall notify CDFW of the injury to the Covered Species immediately by telephone and e-mail followed by a written incident report as described in Condition of Approval 7.11. Notification shall include the date, time, location, and circumstances of the incident and the name of the facility where the animal was taken.	ITP Condition # 8.10	Entire Project	Permittee and Designated Biologist(s)	
53	<u>Vegetation Removal Methods.</u> Vegetative cover shall be removed prior to grading in Work Areas with identified habitat features suitable for Covered Species (as depicted in the Baseline Map Book, Exhibit 5, Baseline Maps 1 through 54). Where possible, hand tools (e.g., trimmer, chain saw, etc.) shall be used to trim or remove shrub vegetation. All vegetation removal in areas with identified habitat features suitable for Covered Species shall be monitored directly (e.g., directly observed) by the Designated Biologist(s) to minimize impacts to Covered Species.	ITP Condition # 8.11	Entire Project	Permittee and Designated Biologist(s)	
54	<u>Geotechnical Investigations.</u> Permittee shall reuse, disperse on site, or remove from the Construction Footprint the soil cuttings from geotechnical investigations. Permittee shall discharge drilling fluids in accordance with the Construction General Permit (Order No. 2009-0009-DWQ as modified by Order No. 2010 0014-DWQ, NPDES No. CAS000002, adopted September 2, 2009, effective July 1, 2010) and the Section 401 Water Quality Certification.	ITP Condition # 8.12	Entire Project	Permittee	

55	<p><u>Specific Measures for CTS:</u></p> <p><u>CTS Salvage and Relocation Plan.</u> The Designated Biologist(s) shall prepare a CTS Salvage and Relocation Plan. The CTS Salvage and Relocation Plan shall include, but not be limited to, a discussion (and map) of the portion of the Project Area which represents potential breeding and upland habitat (as depicted in the Baseline Map Book, Exhibit 5, Baseline Maps 1 through 54); those areas within 1.3 miles of known breeding habitat for the Covered Species; an identification of the survey, hand excavation, capture handling, and relocation methods; identification of relocation area(s); and identification of a wildlife rehabilitation center or veterinary facility that routinely evaluates or treats amphibians. The CTS Salvage and Relocation Plan shall be submitted to CDFW for approval prior to the beginning of Covered Activities. Covered Activities within the Project Area may not proceed until the CTS Relocation Plan is approved in writing by CDFW. Only approved Designated Biologist(s) are authorized to capture and handle CTS.</p>	ITP Condition # 8.13.1	Entire Project	Designated Biologist(s)	
56	<p><u>CTS Pre-construction Surveys.</u> No more than 14 days prior to starting Covered Activities, the Designated Biologist(s) shall survey the Work Area(s) located within that portion of the Construction Footprint that has identified habitat features suitable for CTS (as depicted in the Baseline Map Book, Exhibit 5, Baseline Maps 1 through 54). These surveys shall provide 100 percent visual coverage of the Work Area(s) and a 50-foot buffer zone. If any CTS are found within the Work Area or 50-foot buffer zone(s), the Designated Biologist(s) shall relocate them from the Work Area or buffer zone(s) in accordance with the CDFW-approved CTS Salvage and Relocation Plan prepared in accordance with Condition of Approval 8.13.1 above. The Designated Biologist(s) shall submit a report documenting the results of the pre-construction surveys to CDFW within five days after performing the surveys.</p>	ITP Condition # 8.13.2	Entire Project	Designated Biologist(s)	
57	<p><u>Flag Burrows.</u> The Designated Biologist(s) shall flag all potential small mammal burrows within the Work Area(s) and a 50-foot buffer zone(s) (see Condition of Approval 8.13.2) to alert biological and work crews to their presence. Where feasible, an avoidance buffer of 50 feet or greater around active small mammal burrows shall be maintained regardless if the burrow is in the Work Area or solely within the Work Area's 50-foot buffer zone.</p>	ITP Condition # 8.13.3	Entire Project	Designated Biologist(s)	
58	<p><u>Small Mammal Burrow Excavation.</u> In each Work Area to be disturbed that is within 0.7 mile of known or potential breeding habitat for CTS (as depicted in the Baseline Map Book, Exhibit 5, Baseline Maps 1 through 54), all small mammal burrows flagged per Condition of Approval 8.13.3 that cannot be fully avoided by at least 50 feet shall be fully excavated by hand. This excavation requirement applies regardless if the burrow is located within the Work Area or the Work Area's 50-foot buffer zone. The Designated Biologist(s) shall relocate any live CTS discovered during burrow excavation in accordance with the salvage and relocation plan required in Condition of Approval 8.13.1 above. Excavation shall occur no more than 14 days after the completion of the CTS pre-construction surveys as described in Condition of Approval 8.13.2 above.</p>	ITP Condition # 8.13.4	Entire Project	Designated Biologist(s)	

59	<u>CTS Exclusion Fencing.</u> Permittee shall install exclusion fencing around the perimeter of all Work Area(s) within 0.7 mile of known or potential CTS breeding habitat to prevent CTS migrating into the Work Area(s). Fencing material and design shall be reviewed and approved in writing by CDFW before exclusion fencing installation. The exclusion fence shall be installed <u>after</u> all small mammal burrows inside the planned fence zone needing to be excavated are hand excavated by the Designated Biologist(s) in accordance with Condition of Approval 8.13.4 above to prevent entrapment of CTS within the Work Area(s). The exclusion fence shall be buried a minimum of four inches below ground surface and equipped with one-way exits to avoid entrapment of CTS and other amphibians or reptiles within the fenced area. The Permittee shall also avoid small mammal burrows to the maximum extent possible during the installation of the exclusion fencing. When small mammal burrows cannot be avoided by a 50-foot no disturbance buffer from the fence line, they shall be hand excavated as described in Condition of Approval 8.13.4 by the Designated Biologist(s) prior to commencing fence installation. Alternatively, Permittee can forego exclusion fence installation. If exclusion fence is not erected at Work Area(s) within 0.7 mile of known or potential breeding habitat, all Covered Activities shall cease when a 70 percent or greater chance of rainfall is predicted within 72 hours in accordance with Condition of Approval 8.13.10.	ITP Condition # 8.13.5	Entire Project	Permittee and Designated Biologist(s)	
60	<u>CTS Exclusion Fence Installation.</u> The Designated Biologist(s) shall accompany the exclusion fence construction crew(s) to ensure that CTS are not killed or injured during fence installation. The exclusion fence shall be supported sufficiently to maintain its integrity under all conditions such as wind and heavy rain for the duration of the Covered Activities in the Work Area being fenced. Permittee shall check the exclusion fence at least once weekly and maintain/repair the fence when necessary. Permittee should install temporary exclusion fencing in a sequential manner that corresponds to the progression of Covered Activities within Work Areas. For example, temporary fencing is not required to be installed simultaneously at all Work Areas, and shall be removed immediately upon completion of Covered Activities in each fenced Work Area.	ITP Condition # 8.13.6	Entire Project	Permittee and Designated Biologist(s)	
61	<u>CTS in Construction Footprint.</u> If CTS is found by any person in the Construction Footprint before or during Covered Activities, all work that could potentially harm the CTS shall stop immediately until the Designated Biologist(s) can relocate the CTS following the CTS Salvage and Relocation Plan specified in Condition of Approval 8.13.1 above. The relocation area(s) shall be identified in the CTS Salvage and Relocation Plan by the Designated Biologist(s) prior to the start of Covered Activities and are subject to CDFW approval.	ITP Condition # 8.13.7	Entire Project	Permittee and Designated Biologist(s)	
62	<u>CTS Record of Handling.</u> All CTS captures, relocations, and observations by the Designated Biologist(s) shall include the following documented information: the date, time, and location of each occurrence using Global Positioning System (GPS) technology; the name of the party that actually identified the CTS; circumstances of the incident; the general condition and health of each individual; any diagnostic markings, sex, age (juvenile or adult); actions undertaken; and habitat description. Permittee shall also submit this information to the CNDDDB as per Condition of Approval 7.9. This information shall also be included in the Monthly Compliance Reports and Final Mitigation Report.	ITP Condition # 8.13.8	Entire Project	Permittee and Designated Biologist(s)	
63	<u>Dry Season Work.</u> Fill, vegetation removal, or other ground-disturbing activities within or immediately adjacent to CTS potential breeding habitat (as depicted in the Baseline Map Book, Exhibit 5, Baseline Maps 1 through 54) shall be confined to the dry season from June 15th to October 31st.	ITP Condition # 8.13.9	Entire Project	Permittee	

64	<u>Rain Forecast.</u> The Designated Biologist(s) and Permittee shall monitor the National Weather Service 72-hour forecast for the Project Area. If a 70 percent or greater chance of rainfall is predicted within 72 hours, Permittee shall cease all Covered Activities in all Work Areas where initial ground disturbance (vegetation removal, grading, excavation, etc.) has yet to finish until a zero percent chance of rain is forecast. Work may continue 24 hours after the rain ceases and there is zero percent chance of precipitation in the 72-hour forecast. The Designated Biologist(s) shall re survey each Work Area before Covered Activities resume to capture and relocate any CTS that are discovered during the surveys. Work Areas where exclusion fencing has been installed in accordance with Conditions of Approval 8.13.5 and 8.13.6 above, may continue Covered Activities during rainfall events.	ITP Condition # 8.13.10	Entire Project	Permittee and Designated Biologist(s)	
65	<u>Night Work.</u> Permittee shall strictly prohibit all Covered Activities at night (the period between sunset and sunrise) in Work Areas within 1.3 miles of potential or known CTS breeding sites (as depicted in the Baseline Map Book, Exhibit 5, Baseline Maps 1 through 54) when a 70 percent or greater chance of rainfall is predicted within 72 hours of Covered Activities until zero percent chance of rain is forecast. This restriction is not applicable to Covered Activities at night in Work Areas within 1.3 miles of potential or known CTS breeding sites once they have been encircled with CTS exclusion fencing pursuant to Conditions of Approval 8.13.5 and 8.13.6. However, even after salamander exclusion fencing is installed, this condition still applies to construction-related traffic moving through areas within 1.3 miles of potential or known CTS breeding sites (as depicted in the Baseline Map Book, Exhibit 5, Baseline Maps 1 through 54) that are outside of the CTS exclusion fencing (e.g., on roads outside a fenced Work Area).	ITP Condition # 8.13.11	Entire Project	Permittee	
66	<u>Soil Stockpiles.</u> Permittee shall ensure that soil stockpiles are placed where soil will not pass into potential CTS breeding pools or into any other "Waters of the State," in accordance with Fish and Game Code section 5650. Permittee shall appropriately protect stockpiles to prevent soil erosion.	ITP Condition # 8.13.12	Entire Project	Permittee)	
67	<u>Fieldwork Code of Practice.</u> To ensure that disease is not conveyed between Work Areas the Designated Biologist(s) shall follow the Fieldwork Code of Practice developed by the Declining Amphibian Populations Task Force (Attachment 2). The Designated Biologist(s) may substitute a bleach solution (0.5 to one cup of bleach to one gallon of water) for the ethanol solution. Care shall be taken so that all traces of the disinfectant are removed before entering the next aquatic habitat.	ITP Condition # 8.13.13	Entire Project	Designated Biologist(s)	
68	<u>Specific Measures for SWHA:</u> <u>Pre-construction SWHA Surveys.</u> The Designated Biologist(s) shall conduct pre-construction surveys during the SWHA nesting season (February 15th through September 15th), prior to conducting Covered Activities in each Work Area. Pre-construction surveys shall occur no more than 30 days prior to beginning Covered Activities, and shall include a 0.5-mile buffer around each Work Area. The Designated Biologist(s) shall survey all suitable habitat/nest trees for nesting SWHA. The Designated Biologist(s) or Designated Representative shall provide the nesting season survey results to CDFW in a written report no more than five days prior to beginning Covered Activities.	ITP Condition # 8.14.1	Entire Project	Designated Biologist(s) and Designated Representative	
69	<u>SWHA Nest Buffer.</u> The Permittee and Designated Biologist(s) shall ensure that no Covered Activities occur within 100 feet of a SWHA nest during the nesting season (February 15th through September 15th).	ITP Condition # 8.14.2	Entire Project	Permittee and Designated Biologist(s)	

70	<p><u>SWHA Nest Buffer and Monitoring.</u> If a nesting SWHA is found in a Work Area or the 0.5-mile Work Area buffer (see Condition of Approval 8.14.1), the Designated Biologist(s) shall be present daily for the entire duration of any Covered Activities within the Work Area to monitor the behavior of the potentially affected SWHA. The Designated Biologist(s) shall have the authority to order the cessation of all Covered Activities if the bird(s) exhibits distress and/or abnormal nesting behavior (swooping/stooping, excessive vocalization [distress calls], agitation, failure to remain on nest, failure to deliver prey items for an extended time period, failure to maintain nest, etc.) which may cause reproductive failure (nest abandonment and loss of eggs and/or young). Permittee shall not resume Covered Activities until CDFW has been consulted by the Designated Biologist(s), and both the Designated Biologist(s) and CDFW confirm that the bird's behavior has normalized.</p>	ITP Condition # 8.14.3	Entire Project	Permittee and Designated Biologist(s)	
71	<p><u>Specific Measures for SJKF:</u></p> <p><u>SJKF Survey.</u> No more than 30 days prior to Permittee beginning Covered Activities in each Work Area, the Designated Biologist(s) shall perform a pre-construction survey for SJKF dens (potential, known, active, atypical, and natal) in the particular Work Area. The pre-construction survey shall cover the Work Area and a buffer zone of 500 feet in size beyond the Work Area's boundaries.</p>	ITP Condition # 8.15.1	Entire Project	Permittee and Designated Biologist(s)	
72	<p><u>SJKF Den Avoidance.</u> If a potential SJKF den (any subterranean hole, three inches or larger, for which available evidence is insufficient to conclude that it is being used or has been used by a SJKF) is discovered or a SJKF is found in an "atypical" den such as a pipe or culvert, a minimum 50-foot buffer around the potential or "atypical" den shall be established using flagging. If a known SJKF den is discovered, Permittee shall establish a minimum buffer of at least 100 feet around the den using fencing or flagging. If a natal den (den in which SJKF young are reared) is discovered, a buffer of at least 200 feet around the den using fencing or flagging shall be established. For any natal dens with pups, the den shall have a buffer of at least 500 feet around it using fencing or flagging. Buffer zones shall be considered Environmentally Sensitive Areas, and no Covered Activities are allowed within a buffer except per Condition of Approval 8.15.3. The Permittee shall notify the United States Fish and Wildlife Service (USFWS) and CDFW's Regional Representative immediately via telephone or e-mail if any SJKF active dens, natal dens, or occupied atypical dens are discovered within or immediately adjacent to any Work Area.</p>	ITP Condition # 8.15.2	Entire Project	Permittee	

73	<u>SJKF Den Excavation.</u> For active dens and potential dens that exhibit signs of SJKF use or characteristics suggestive of SJKF dens (including dens in natural substrate and in/under man-made structures) that cannot be avoided as per Condition of Approval 8.15.2, and if, after four consecutive days of monitoring with tracking medium or infrared camera, the Designated Biologist(s) has determined that SJKF is not currently present, the den may be excavated. Potential SJKF dens without any signs of SJKF use may be excavated under the supervision of the Designated Biologist(s) without advance tracking or camera monitoring. Natal dens shall not be excavated until the pups and adults have vacated and then only after consultation with the USFWS and CDFW. If the excavation process reveals evidence of current use by SJKF then den excavation shall cease immediately and tracking or camera monitoring as described above shall be conducted/resumed. Excavation of the den may be completed when, in the judgment of the Designated Biologist(s), the SJKF has escaped from the partially excavated den. SJKF dens shall be carefully excavated until it is certain no individuals of SJKF are inside. Dens shall be fully excavated, filled with dirt and compacted to ensure that SJKF cannot reenter or use the den during Covered Activities. If an individual SJKF does not vacate a den within the Work Area within a reasonable timeframe, Permittee shall contact USFWS and CDFW and get written guidance (e mail will suffice) from both agencies prior to proceeding with den excavation.	ITP Condition # 8.15.3	Entire Project	Permittee and Designated Biologist(s)	
74	<u>SJKF Den Replacement Plan.</u> Within ten days of fully excavating a den, filling it with dirt, and compacting it (see Condition of Approval 8.15.3), Permittee shall replace each excavated known, active, and natal den with an artificial den to compensate for the loss of important shelter used by SJKF for protection, reproduction, and escape from predators. A minimum of 30 days prior to commencing Covered Activities, the Designated Biologist(s) shall prepare a SJKF Den Replacement Plan. The SJKF Den Replacement Plan shall include, but not be limited to, a discussion and map of the locations of each known, active, and natal den; a discussion and map of potential locations for artificial den replacements; an identification of the hand excavation methods; and identification of the replacement den dimensions (e.g., depth and width of den, width of den entrance, number of and placement of entrances to natal dens). The SJKF Den Replacement Plan shall be submitted to CDFW for approval prior to the beginning of Covered Activities. Covered Activities within the Project Area may not proceed until the SJKF Den Replacement Plan is approved in writing by CDFW.	ITP Condition # 8.15.4	Entire Project	Permittee and Designated Biologist(s)	
Lazy K Ranch Mitigation Site Activities					
75	<u>Timeframe for Mitigation Site Activities.</u> Permittee shall complete all Mitigation Site activities at the Lazy K Ranch within 18 months of the start of Project construction, as documented in the Notification Before Commencement submitted pursuant to Condition of Approval 7.1.	ITP Condition # 8.16	Entire Project	Permittee	
76	<u>Conditions of Approval at the Mitigation Site.</u> Restoration activities at the Mitigation Site shall implement all General Provisions set forth in Condition of Approval 6 of the ITP.	ITP Condition # 8.17	Entire Project	Permittee	

77	<u>Notification of Non-compliance at the Mitigation Site.</u> The Designated Representative shall immediately notify CDFW in writing if he or she determines that the Permittee is not in compliance with any Condition of Approval of the ITP at the Mitigation Site, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in the ITP and/or this MMRP. The Designated Representative shall report any non-compliance with the ITP at the Mitigation Site to CDFW within 24 hours.	ITP Condition # 8.19	Entire Project	Designated Representative	
78	<u>Compliance Monitoring at the Mitigation Site.</u> The Designated Biologist(s) shall be on-site daily at each Work Area within the Mitigation Site when vegetation and soil disturbance Covered Activities occur. The Designated Biologist(s) shall conduct compliance inspections to: (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of the ITP, and that Covered Activities are only occurring in the Project Area. During initial vegetation and soil disturbance, the Designated Biologist(s) shall conduct compliance inspections continuously within each of the Work Area(s) where Covered Activities are occurring. After initial vegetation and soil disturbance, the Designated Biologist(s) shall conduct compliance inspections a minimum of once per day within each of the Work Area(s) where Covered Activities are occurring. The Designated Representative or Designated Biologist(s) shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, and monitoring activities required by the ITP. The Designated Biologist(s) shall conduct compliance inspections a minimum of monthly during periods of inactivity and after clearing, grubbing, and grading are completed.	ITP Condition # 8.20	Entire Project	Designated Biologist(s) and Designated Representative	
79	<u>Equipment Fueling and Maintenance at the Mitigation Site.</u> Mobile equipment fueling and maintenance at the Mitigation Site shall occur at least 100 feet from identified habitat features suitable for Covered Species. Fixed equipment fueling and maintenance areas, either permanently or temporarily fixed, shall be located at a distance of at least 100 feet from Covered Species habitat, and shall include fixed containment devices that will preclude fuel or other liquids from exiting the equipment fueling maintenance area in the event of a spill or leak. Sufficient spill containment and cleanup equipment shall be present at all mobile, temporary, and permanent equipment fueling locations.	ITP Condition # 8.21	Entire Project	Permittee	
80	<u>Staging Area at the Mitigation Site.</u> The temporary Staging Area at the Mitigation Site shall be located at a distance of at least 100 feet from Covered Species habitat, and shall include fixed containment devices that will preclude any fuel or other liquids from exiting the Staging Area in the event of a spill or leak. Sufficient spill containment and cleanup equipment shall be present at the temporary Staging Area. Permittee shall restore the temporary Staging Area to pre-Project conditions upon the completion of vernal pool creation and riparian restoration.	ITP Condition # 8.22	Entire Project	Permittee	
81	<u>Night Work at the Mitigation Site.</u> Permittee shall strictly prohibit all Covered Activities at night (the period between sunset and sunrise) at the Mitigation Site.	ITP Condition # 8.23	Entire Project	Permittee	

82	<u>Herbicide Use at the Mitigation Site.</u> Permittee shall prohibit the use of herbicides at the Mitigation Site, except to spot-treat non-native invasive vegetation (as defined, described, and inventoried as invasive by the California Invasive Plant Council). Permittee shall ensure that all herbicide use (mixing, application, and clean-up) at the Mitigation Site is done by a licensed applicator in accordance with all applicable state, federal, and local regulations. Permittee shall only apply herbicide sprays via ground application when wind speed measures less than three mph at the Mitigation Site. Permittee shall ensure all herbicide sprays utilized within and adjacent to identified habitat features suitable for Covered Species contain a dye (registered for aquatic use by the California Department of Pesticide Regulation, if warranted) to prevent overspray at the Mitigation Site.	ITP Condition # 8.24	Entire Project	Permittee	
83	<u>Rodenticide Use at the Mitigation Site.</u> Permittee shall prohibit the use of rodenticides at the Mitigation Site.	ITP Condition # 8.25	Entire Project	Permittee	
84	<u>Covered Species Observations at the Mitigation Site.</u> At any time while engaged in Covered Activities, all workers shall inform the Designated Biologist(s) if a Covered Species is seen within or near the Work Area. All Covered Activities in the vicinity of the Covered Species, which could injure or kill the animal, shall cease until the Covered Species is moved by the Designated Biologist(s) or it moves from the Work Area of its own accord.	ITP Condition # 8.26	Entire Project	Permittee and Designated Biologist(s)	
85	<u>Daily Entrapment Inspections at the Mitigation Site.</u> The Designated Biologist(s) shall inspect all open holes, sumps, and trenches within each Mitigation Site Work Area at the beginning, middle, and end of each day for trapped Covered Species. All trenches, holes, sumps, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope and that are between two- and eight feet deep shall be covered when workers or equipment are not actively working in the excavation, which includes cessation of work overnight, or shall have an escape ramp of earth or a non-slip material with a less than 1:1 (45 degree) slope. All trenches, holes, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope and greater than eight feet deep shall be covered when workers or equipment are not actively working in the excavation and at the end of each work day. To prevent inadvertent entrapment of Covered Species or any other animals, the Designated Biologist(s) shall oversee the covering of all excavated, trenches, holes, sumps, or other excavations with a greater than 1:1 (45 degree) slope of any depth with barrier material (such as hardware cloth) at the close of each working day such that Covered Species are unable to dig or squeeze under the barrier and become entrapped. The outer two feet of excavation cover shall conform to solid ground so that gaps do not occur between the cover and the ground and secured with soil staples or similar means to prevent gaps. Each morning, mid-day, the end of each day (including weekends and any other non-work days), and immediately before trenches, holes, sumps, or other excavations are back-filled, the Designated Biologist(s) shall thoroughly inspect them for trapped Covered Species. Trenches, holes, sumps, or other excavations that are covered long-term shall be inspected at the beginning of each working day to ensure inadvertent entrapment has not occurred. If any worker discovers that Covered Species have become trapped, Permittee shall cease all Covered Activities in the vicinity and notify the Designated Biologist(s) immediately. Project workers and the Designated Biologist(s) shall allow the Covered Species to escape unimpeded if possible before Covered Activities are allowed to continue, or, if the Covered Species is CTS, the Designated Biologist(s) shall capture and relocated the animal as per the CTS Salvage and Relocation Plan described in Condition of Approval 8.13.1.	ITP Condition # 8.27	Entire Project	Permittee and Designated Biologist(s)	

86	<u>Materials Inspection at the Mitigation Site.</u> Workers shall thoroughly inspect for Covered Species at the Mitigation Site in all construction pipe, culverts, or similar structures with a diameter of 7.6 centimeters (three inches) or greater that are stored for one or more overnight periods before the structure is subsequently moved, buried, or capped. If during inspection one of these animals is discovered inside the structure, workers shall notify the Designated Biologist(s) and allow the Covered Species to safely escape that section of the structure before moving and utilizing the structure.	ITP Condition # 8.28	Entire Project	Permittee and Designated Biologist(s)	
87	<u>Equipment Inspection at the Mitigation Site.</u> Workers shall inspect for Covered Species under vehicles and equipment at the Mitigation Site before the vehicles and equipment are moved. If a Covered Species is present, the worker shall notify the Designated Biologist(s) and wait for the Covered Species to move unimpeded to a safe location. Alternatively, the Permittee shall contact the Designated Biologist(s) to determine if the Designated Biologist(s) can safely move the Covered Species out of harm's way in compliance with the ITP.	ITP Condition # 8.29	Entire Project	Permittee and Designated Biologist(s)	
88	<u>Covered Species Injury at the Mitigation Site.</u> If a Covered Species is injured at the Mitigation Site as a result of Mitigation Site Covered Activities, the Designated Biologist(s) shall immediately take it to a CDFW approved wildlife rehabilitation or veterinary facility that routinely evaluates and treats the injured Covered Species. Permittee shall identify the facility before starting Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. Permittee shall notify CDFW of the injury to the Covered Species immediately by telephone and e-mail followed by a written incident report as described in Condition of Approval 7.11. Notification shall include the date, time, location, and circumstances of the incident and the name of the facility where the animal was taken.	ITP Condition # 8.30	Entire Project	Permittee and Designated Biologist(s)	
89	<u>Vegetation Removal Methods at the Mitigation Site.</u> Vegetative cover at the Mitigation Site shall be removed prior to grading in Work Areas with identified habitat features suitable for Covered Species. Where possible, hand tools (e.g., trimmer, chain saw, etc.) shall be used to trim or remove shrub vegetation. All vegetation removal in areas with identified habitat features suitable for Covered Species shall be monitored directly (e.g. directly observed) by the Designated Biologist(s) to minimize impacts to Covered Species.	ITP Condition # 8.31	Entire Project	Permittee and Designated Biologist(s)	
90	<u>Preservation Area.</u> Permittee shall not conduct any Covered Activities within, or otherwise impact, the Preservation Area at the Mitigation Site.	ITP Condition # 8.32	Entire Project	Permittee	
91	<u>Wetland Restoration:</u> Land grading and contouring shall occur only within the 115.18-acre Wetland Restoration Area, where vernal pools will be created.	ITP Condition # 8.33.1	Entire Project	Permittee	
92	Permittee shall maintain GIS shapefile layers and associated maps depicting mapped areas of all Covered Activities within the Wetland Restoration Area. Permittee shall provide the above information to CDFW with the Monthly Compliance Report.	ITP Condition # 8.33.2	Entire Project	Designated Biologist(s)	
93	Permittee shall document the cumulatively disturbed acreages of the Wetland Restoration Area at the Mitigation Site. Permittee shall provide the above information to CDFW with the Monthly Compliance Report.	ITP Condition # 8.33.3	Entire Project	Permittee	

94	Topsoil excavation shall be limited to the top three to four inches.	ITP Condition # 8.33.4	Entire Project	Permittee	
95	Soil shall not be disposed of off-site and exposed soil shall be reseeded with naturalized plant seed appropriate to the site to minimize erosion and invasive plant establishment.	ITP Condition # 8.33.5	Entire Project	Permittee	
96	A minimum of two inches of soil above the hardpan shall remain for propagation of vernal pool plants.	ITP Condition # 8.33.6	Entire Project	Permittee	
97	<u>Inoculum Collection Area:</u> Permittee shall collect inoculum from up to two acres of natural vernal pools within the Inoculum Collection Area only for distribution within the created vernal pool basins.	ITP Condition # 8.34.1	Entire Project	Permittee	
98	Permittee shall maintain GIS shapefile layers and associated maps depicting mapped areas of all disturbances within the Inoculum Collection Area. Permittee shall provide the above information to CDFW with the Monthly Compliance Report.	ITP Condition # 8.34.2	Entire Project	Permittee	
99	Permittee shall document the cumulatively disturbed acreages of the Inoculum Collection Area at the Mitigation Site. Permittee shall provide the above information to CDFW with the Monthly Compliance Report.	ITP Condition # 8.34.3	Entire Project	Permittee	
100	Inoculum shall not be collected from vernal pools known to support non-native invasive flora (as defined, described, and inventoried as invasive by the California Invasive Plant Council) and fauna species (e.g., American bullfrog [<i>Lithobates catesbeianus</i>]) that could pose a threat to vernal pool vegetation or invertebrate communities.	ITP Condition # 8.34.4	Entire Project	Permittee	
101	Inoculum shall not be collected from vernal pools known to support or found to support succulent owl's-clover (<i>Castilleja campestris</i> spp. <i>succulenta</i>) or other state-listed plants.	ITP Condition # 8.34.5	Entire Project	Permittee	
102	Inoculum shall be collected manually or by using a small, rubber-tired tractor to minimize disturbance to vernal pools.	ITP Condition # 8.34.6	Entire Project	Permittee	
103	A maximum of ten percent of each donor vernal pool's area shall be used for inoculum collection.	ITP Condition # 8.34.7	Entire Project	Permittee	
104	Inoculum collection shall be limited to no greater than one inch in depth to minimize disturbance to the donor vernal pools. Once inoculum is collected from a vernal pool, any scraped areas shall be smoothed out.	ITP Condition # 8.34.8	Entire Project	Permittee	

105	<u>Riparian Restoration Area:</u> Riparian habitat restoration shall be limited to three acres within the 4.09-acre Riparian Restoration Area.	ITP Condition # 8.35.1	Entire Project	Permittee	
106	Permittee shall prepare and maintain GIS shapefile layers and associated maps depicting mapped areas of all restoration activities within the Riparian Restoration Area. Permittee shall provide the above information to CDFW with the Monthly Compliance Report.	ITP Condition # 8.35.2	Entire Project	Permittee	
107	Permittee shall document the cumulatively disturbed acreages of the Riparian Restoration Area at the Mitigation Site. Permittee shall provide the above information to CDFW with the Monthly Compliance Report.	ITP Condition # 8.35.3	Entire Project	Permittee	
108	Collection of canes from established trees to be used for replanting shall be limited to 10 canes per tree and shall be collected between November and February.	ITP Condition # 8.35.4	Entire Project	Permittee	
109	Holes for replanting the canes shall be excavated using a small tractor with an attached auger.	ITP Condition # 8.35.5	Entire Project	Permittee	
110	Holes for container plants shall be excavated approximately three times the width and two times the height of the container size.	ITP Condition # 8.35.6	Entire Project	Permittee	
111	Installation of the temporary irrigation system shall be accomplished by hand using a utility truck to transport pipe to the Riparian Restoration Area. The temporary irrigation system shall be removed when plantings are sufficiently established and irrigation is no longer needed.	ITP Condition # 8.35.7	Entire Project	Permittee	
112	Riparian Restoration Area activities shall be limited to the use of hand tools, an auger mounted on a small tractor, and personal and light-duty trucks to transport and plant riparian trees and shrubs.	ITP Condition # 8.35.8	Entire Project	Permittee	
113	During riparian restoration, equipment shall be stored within a 0.23-acre area on the bluff outside of the Chowchilla River floodplain directly adjacent to the Riparian Restoration Area. The area shall not be scraped or otherwise cleared.	ITP Condition # 8.35.9	Entire Project	Permittee	
114	All Riparian Restoration Area Covered Activities shall occur outside the OHWM and be limited to those areas along the Chowchilla River channel corridor. Trucks and other equipment shall remain on the upland side of the OHWM.	ITP Condition # 8.35.10	Entire Project	Permittee	
115	No grading shall occur as part of the Riparian Restoration Area activities.	ITP Condition # 8.35.11	Entire Project	Permittee	

116	<p><u>Specific Measures for CTS at the Mitigation Site:</u></p> <p><u>Wetland Development and Riparian Restoration Plan.</u> The Permittee shall prepare and submit to CDFW a Wetland Development and Riparian Restoration Plan (Plan) for review and written approval prior to starting any CTS breeding pond creation or riparian restoration activities at the Mitigation Site. The creation and restoration activities shall occur within a maximum 115.18-acre Wetland Restoration Area, a 4.09-acre Riparian Restoration Area, a 2.0-acre Inoculum Collection Area, and a 1.23-acre Staging Area.</p>	ITP Condition # 8.36.1	Entire Project	Permittee	
117	<p><u>CTS at the Mitigation Site.</u> If CTS is found by any person at the Mitigation Site before or during Covered Activities, all work that could potentially harm the CTS shall stop immediately until the Designated Biologist(s) can relocate the CTS following the CTS Salvage and Relocation Plan specified in Condition of Approval 8.13.1 above. The relocation area(s) shall be identified in the CTS Salvage and Relocation Plan by the Designated Biologist(s) prior to the start of Covered Activities and are subject to CDFW approval.</p>	ITP Condition # 8.36.2	Entire Project	Permittee and Designated Biologist(s)	
118	<p><u>CTS Record of Handling at the Mitigation Site.</u> All CTS captures, relocations, and observations by the Designated Biologist(s) at the Mitigation Site shall include the following documented information: the date, time, and location of each occurrence using GPS technology; the name of the party that actually identified the CTS; circumstances of the incident; the general condition and health of each individual; any diagnostic markings, sex, age (juvenile or adult); actions undertaken; and habitat description. Permittee shall also submit this information to the CNDDB as per Condition of Approval 7.9. This information shall also be included in the Monthly Compliance Reports and Final Mitigation Report.</p>	ITP Condition # 8.36.3	Entire Project	Permittee and Designated Biologist(s)	
119	<p><u>Burrow Avoidance and Excavation at the Mitigation Site.</u> Potential CTS burrows shall be avoided by at least 50 feet during all Covered Activities at the Mitigation Site to prevent the collapse of the burrow openings, the burrow system, or otherwise entombing or crushing CTS. If burrows cannot be avoided, then they shall be hand excavated in accordance with Condition of Approval 8.13.4 and any CTS uncovered during burrow excavation shall be captured and relocated in accordance with the CDFW approved CTS Salvage and Relocation Plan as described in Condition of Approval 8.13.1 above.</p>	ITP Condition # 8.36.4	Entire Project	Permittee	
120	<p><u>Dry Season Work at the Mitigation Site.</u> Fill or other ground-disturbing activities at the Mitigation Site shall be confined to the dry season from June 15th to October 31st.</p>	ITP Condition # 8.36.5	Entire Project	Permittee	
121	<p><u>Rain Forecast at the Mitigation Site.</u> The Designated Biologist and Permittee shall monitor the National Weather Service 72-hour forecast for the Mitigation Site. If a 70 percent or greater chance of rainfall is predicted within 72 hours, Permittee shall cease all Covered Activities at the Mitigation Site where initial ground disturbance (vegetation removal, grading, excavation, etc.) has yet to occur until zero percent chance of rain is forecast. Work may continue 24 hours after the rain ceases and there is zero percent chance of precipitation in the 72-hour forecast.</p>	ITP Condition # 8.36.6	Entire Project	Permittee and Designated Biologist(s)	
122	<p><u>Soil Stockpiles at the Mitigation Site.</u> Permittee shall ensure that soil stockpiles at the Mitigation Site are placed where soil will not pass into potential CTS breeding pools or into any other "Waters of the State," in accordance with Fish and Game Code section 5650. Permittee shall appropriately protect stockpiles to prevent soil erosion.</p>	ITP Condition # 8.36.7	Entire Project	Permittee	

123	<u>Fieldwork Code of Practice.</u> To ensure that disease is not conveyed between Work Areas the Designated Biologist(s) shall follow the Fieldwork Code of Practice developed by the Declining Amphibian Populations Task Force (Attachment 2). The Designated Biologist(s) may substitute a bleach solution (0.5 to one cup of bleach to one gallon of water) for the ethanol solution. Care shall be taken so that all traces of the disinfectant are removed before entering the next aquatic habitat.	ITP Condition # 8.36.8	Entire Project	Designated Biologist(s)	
124	<u>Specific Measures for SWHA at the Mitigation Site:</u> <u>Pre-construction SWHA Surveys at the Mitigation Site.</u> The Designated Biologist(s) shall conduct pre-construction surveys at the Mitigation Site during the SWHA nesting season (February 15th through September 15th), prior to conducting Covered Activities in each Work Area. Pre-construction surveys shall occur no more than 30 days prior to beginning Covered Activities, and shall include a 0.5-mile buffer around each Work Area. The Designated Biologist(s) shall survey all suitable habitat/nest trees for nesting SWHA. The Designated Biologist(s) or Designated Representative shall provide the nesting season survey results to CDFW in a written report no more than five days prior to beginning Covered Activities.	ITP Condition # 8.37.1	Entire Project	Designated Biologist and Designated Representative	
125	<u>SWHA Nest Buffer at the Mitigation Site.</u> The Permittee and Designated Biologist(s) shall ensure that no Covered Activities occur within 100 feet of a SWHA nest during the nesting season (February 15th through September 15th) at the Mitigation Site.	ITP Condition # 8.37.2	Entire Project	Permittee and Designated Biologist(s)	
126	<u>SWHA Nest Buffer and Monitoring at the Mitigation Site.</u> If a nesting SWHA is found in a work area or the 0.5-mile Work Area buffer (See Condition of Approval 8.37.1), the Designated Biologist(s) shall be present daily for the entire duration of any Covered Activities within the Work Area to monitor the behavior of the potentially affected SWHA. The Designated Biologist(s) shall have the authority to order the cessation of all Covered Activities if the bird(s) exhibits distress and/or abnormal nesting behavior (swooping/stooping, excessive vocalization [distress calls], agitation, failure to remain on nest, failure to deliver prey items for an extended time period, etc.) which may cause reproductive failure (nest abandonment and loss of eggs and/or young). Permittee shall not resume Covered Activities until CDFW has been consulted by the Designated Biologist(s), and both the Designated Biologist(s) and CDFW confirm that the bird's behavior has normalized.	ITP Condition # 8.37.3	Entire Project	Permittee and Designated Biologist(s)	
127	<u>Tree and Woody Shrub Removal at the Mitigation Site.</u> Permittee shall limit removal of trees and woody shrubs at the Mitigation Site to between September 16th and February 14th of any year.	ITP Condition # 8.37.4	Entire Project	Permittee	
128	<u>Specific Measures for SJKF at the Mitigation Site:</u> <u>SJKF Survey at the Mitigation Site.</u> No more than 30 days prior to Permittee beginning Covered Activities in each Mitigation Site Work Area, the Designated Biologist(s) shall perform a pre-construction survey for SJKF dens (potential, known, active, atypical, and natal) in the particular Work Area. The pre-construction survey shall cover the Work Area and a buffer zone of 500 feet in size beyond the Work Area's boundaries.	ITP Condition # 8.38.1	Entire Project	Permittee and Designated Biologist(s)	

129	<u>SJKF Den Avoidance at the Mitigation Site.</u> If a potential SJKF den is discovered or a SJKF is found in an "atypical" den such as a pipe or culvert at the Mitigation Site, a minimum 50-foot buffer around the "atypical" den shall be established using flagging. If a known SJKF den is discovered at the Mitigation Site, Permittee shall establish a minimum buffer of at least 100 feet around the den using fencing. If a natal den is discovered at the Mitigation Site, a buffer of at least 200 feet around the den using fencing or flagging shall be established. For any natal dens with pups at the Mitigation Site, the den shall have a buffer of at least 500 feet around it using fencing or flagging. Buffer zones shall be considered Environmentally Sensitive Areas, and no Covered Activities are allowed within a buffer except per Condition of Approval 8.38.3. The Permittee shall notify the USFWS and CDFW's Regional Representative immediately via telephone or e-mail if any SJKF active dens, natal dens, or occupied atypical dens are discovered within or immediately adjacent to any Mitigation Site Work Area.	ITP Condition # 8.38.2	Entire Project	Permittee	
130	<u>SJKF Den Excavation at the Mitigation Site.</u> For active dens and potential dens that exhibit signs of SJKF use or characteristics suggestive of SJKF dens (including dens in natural substrate and in/under man-made structures) within the portion of the Mitigation Site Work Area to be disturbed and that cannot be avoided as per Condition 8.38.2, and if, after four consecutive days of monitoring with tracking medium or infrared camera, the Designated Biologist(s) has determined that SJKF is not currently present, the den may be excavated. Potential SJKF dens without any signs of SJKF use at the Mitigation Site may be excavated under the supervision of the Designated Biologist(s) without advance tracking or camera monitoring. Natal dens at the Mitigation Site shall not be excavated until the pups and adults have vacated and then only after consultation with the USFWS and CDFW. If the excavation process reveals evidence of current use by SJKF then den excavation shall cease immediately and tracking or camera monitoring as described above shall be conducted/resumed. Excavation of the den may be completed when, in the judgment of the Designated Biologist(s), the SJKF has escaped from the partially excavated den. SJKF dens shall be carefully excavated until it is certain no individuals of SJKF are inside. Dens shall be fully excavated, filled with dirt and compacted to ensure that SJKF cannot reenter or use the den during Covered Activities. If an individual SJKF does not vacate a den within the Work Area within a reasonable timeframe, Permittee shall contact USFWS and CDFW and get written guidance (e mail will suffice) from both agencies prior to proceeding with den excavation.	ITP Condition # 8.38.3	Entire Project	Permittee and Designated Biologist(s)	
131	<u>SJKF Den Replacement Plan at the Mitigation Site.</u> Within ten days of fully excavating a den, filling it with dirt, and compacting it (see Condition of Approval 8.38.3), Permittee shall replace each excavated known, active, and natal den at the Mitigation Site with an artificial den to compensate for the loss of important shelter used by SJKF for protection, reproduction, and escape from predators in accordance with the CDFW-approved SJKF Den Replacement Plan (see Condition of Approval 8.15.4).	ITP Condition # 8.38.4	Entire Project	Permittee	
POST-CONSTRUCTION					
132	<u>Refuse Removal.</u> Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all temporary fill and construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.	ITP Condition # 6.16	Post-construction	Permittee	

Construction Footprint O&M Activities					
133	<u>O&M Activity Requirement.</u> Permittee shall implement all General Provisions set forth in Condition of Approval 6 of the ITP for O&M Covered Activities.	ITP Condition # 8.39	Operations & Maintenance	Permittee	
134	<u>O&M Quarterly Status Report.</u> Permittee shall provide CDFW with an O&M Quarterly Status Report (O&M QSR) no later than the 15th day of January, March, June, and September beginning with issuance of the ITP and continuing until the expiration of the ITP. Each O&M QSR shall include, at a minimum: (1) a summary of all O&M Covered Activities completed for that quarter; (2) a general description of the status of the O&M Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in this MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating O&M Covered Activities impacts; (5) all available information about O&M-related incidental take of the Covered Species; (6) information about other O&M impacts on the Covered Species; (7) updates to the mapped areas of all land disturbances and mapped areas of identified habitat features suitable for Covered Species within the Work Area in accordance with Condition of Approval 7.4 above; (8) a summary of findings from pre-construction surveys (e.g., number of times a Covered Species or a den, burrow, or nest was encountered, location, if avoidance was achieved, if not, what other measures were implemented); (9) beginning and ending dates of O&M Covered Activities undertaken during the reporting quarter; and (10) a summary of the cumulative status of the disturbed acreages of all land disturbances and identified habitat features for each of the Covered Species within the Project Area, both for the preceding quarter and a total since ITP issuance, and the acreages of all land and identified habitat features anticipated to be disturbed over the succeeding quarter in accordance with Conditions of Approval 7.4 and 7.5 above.	ITP Condition # 8.40	Operations & Maintenance	Permittee(s)	
135	<u>Pre-O&M Covered Activities Clearance Surveys.</u> Prior to starting any ground- or vegetation-disturbing O&M Covered Activities during the CTS breeding season (November 1st through March 31st) in each Work Area located within 1.3 miles of known or potential breeding habitat or within known or potential breeding habitat, the Designated Biologist(s) shall survey the Work Area for CTS. If any CTS are found, the Designated Biologist(s) shall relocate them from the Work Area in accordance with the CDFW-approved CTS Salvage and Relocation Plan (see Condition of Approval 8.13.1). Only approved Designated Biologist(s) are authorized to capture and handle the Covered Species.	ITP Condition # 8.41	Operations & Maintenance	Designated Biologist(s)	
136	<u>CTS in O&M Work Area(s).</u> If any CTS are found in a Work Area during O&M Covered Activities, all Covered Activities that could potentially harm CTS shall stop immediately until the Designated Biologist(s) can relocate the CTS following the CTS Salvage and Relocation Plan in accordance with Condition of Approval 8.13.1.	ITP Condition # 8.42	Operations & Maintenance	Permittee and Designated Biologist(s)	

137	<u>CTS Record of Handling for O&M Work Areas.</u> All CTS captures, relocations, and observations by the Designated Biologist(s) during Covered Activities in O&M Work Areas shall include the following documented information: the date, time, and location of each occurrence using GPS technology; the name of the party that actually identified the CTS; circumstances of the incident; the general condition and health of each individual; any diagnostic markings, sex, age (juvenile or adult); actions undertaken; and habitat description. Permittee shall also submit this information to the CNDDB as per Condition of Approval 7.9. This information shall also be included in the O&M QSR and Final Mitigation Report.	ITP Condition # 8.43	Operations & Maintenance	Permittee and Designated Biologist(s)	
138	<u>O&M Covered Activities Rain Forecast.</u> The Designated Biologist(s) and Permittee shall monitor the National Weather Service 72-hour forecast for the Project Area. If a 70 percent or greater chance of rainfall is predicted within 72 hours, Permittee shall cease all ground-disturbing O&M Covered Activities. Work may continue 24 hours after the rain ceases and there is zero percent chance of precipitation in the 72-hour forecast. If work must continue when rain is forecast, the Designated Biologist(s) shall survey the area and capture and relocate any CTS that are discovered. The individuals shall be relocated in accordance with the CDFW-approved CTS Salvage and Relocation Plan (see Condition of Approval 8.13.1).	ITP Condition # 8.44	Operations & Maintenance	Permittee and Designated Biologist(s)	
139	<u>O&M Pre-construction SWHA Surveys.</u> The Designated Biologist(s) shall conduct pre-construction surveys in the O&M Work Areas during the SWHA nesting season (February 15th through September 15th), prior to conducting Covered Activities in each Work Area. Pre-construction surveys shall occur no more than 30 days prior to beginning O&M Covered Activities, and shall include a 0.5-mile buffer around each Work Area. The Designated Biologist(s) shall survey all suitable habitat/nest trees for nesting SWHA. The Designated Biologist(s) or Designated Representative shall provide the nesting season survey results to CDFW in a written report no more than five days prior to beginning Covered Activities.	ITP Condition # 8.45	Operations & Maintenance	Designated Biologist(s) and Designated Representative	
140	<u>O&M Nesting SWHA Nest Buffer.</u> The Permittee and Designated Biologist(s) shall ensure that no O&M Covered Activities occur within 100 feet of a SWHA nest during the nesting season (February 15th through September 15th).	ITP Condition # 8.46	Operations & Maintenance	Permittee and Designated Biologist(s)	
141	<u>O&M SWHA Nest Buffer and Monitoring.</u> If a nesting SWHA is found in the O&M Work Area or the 0.5-mile Work Area buffer (see Condition of Approval 8.14.1), including access routes, the Designated Biologist(s) shall be present daily for the entire duration of any ground disturbing Covered Activities to monitor the behavior of the potentially affected SWHA. The Designated Biologist(s) shall have the authority to order the cessation of all Covered Activities if the bird(s) exhibits distress and/or abnormal nesting behavior (swooping/stooping, excessive vocalization [distress calls], agitation, failure to remain on nest, failure to deliver prey items for an extended time period, etc.) which may cause reproductive failure (nest abandonment and loss of eggs and/or young). Permittee shall not resume ground disturbing Covered Activities until CDFW has been consulted by the Designated Biologist(s), and both the Designated Biologist(s) and CDFW confirm that the bird's behavior has normalized.	ITP Condition # 8.47	Operations & Maintenance	Permittee and Designated Biologist(s)	
142	<u>O&M Tree and Woody Shrub Removal.</u> Permittee shall prohibit removal of trees and woody shrubs in the O&M Work Area(s) to between September 16th and February 14th of any year.	ITP Condition # 8.48	Operations & Maintenance	Permittee	

143	<u>O&M SJKF Survey.</u> No more than 30 days prior to Permittee beginning Covered Activities in each O&M Work Area, the Designated Biologist(s) shall perform a pre-construction survey for SJKF dens (potential, known, active, atypical, and natal) in the particular Work Area. The pre-construction survey shall cover the O&M Work Area(s) and a buffer zone of 500 feet in size beyond the Work Area's boundaries.	ITP Condition # 8.49	Operations & Maintenance	Designated Biologist(s)	
144	<u>O&M SJKF Den Avoidance.</u> If a potential SJKF den is discovered or a SJKF is found in an "atypical" den such as a pipe or culvert in the O&M Work Area(s), a minimum 50-foot buffer around the "atypical" den shall be established using flagging. If a known SJKF den is discovered in the Work Area(s), Permittee shall establish a minimum buffer of at least 100 feet around the den using fencing. If a natal den is discovered in the Work Area(s), a buffer of at least 200 feet around the den using fencing or flagging shall be established. For any natal dens with pups in the Work Area(s), the den shall have a buffer of at least 500 feet around it using fencing or flagging. Buffer zones shall be considered Environmentally Sensitive Areas, and no O&M Covered Activities are allowed within a buffer except per Condition of Approval 8.51. The Permittee shall notify the USFWS and CDFW's Regional Representative immediately via telephone or e-mail if any SJKF active dens, natal dens, or occupied atypical dens are discovered within or immediately adjacent to any O&M Work Area.	ITP Condition # 8.50	Post-construction	Permittee	
145	<u>O&M SJKF Den Excavation.</u> For active dens and potential dens that exhibit signs of SJKF use or characteristics suggestive of SJKF dens (including dens in natural substrate and in/under man-made structures) within the portion of the O&M Work Area(s) to be disturbed and that cannot be avoided as per Condition of Approval 8.50, and if, after four consecutive days of monitoring with tracking medium or infrared camera, the Designated Biologist(s) has determined that SJKF is not currently present, the den may be excavated. Potential SJKF dens without any signs of SJKF use in the O&M Work Area(s) may be excavated under the supervision of the Designated Biologist(s) without advance tracking or camera monitoring. Natal dens at the O&M Work Area(s) shall not be excavated until the pups and adults have vacated and then only after consultation with the USFWS and CDFW. If the excavation process reveals evidence of current use by SJKF then den excavation shall cease immediately and tracking or camera monitoring as described above shall be conducted/resumed. Excavation of the den may be completed when, in the judgment of the Designated Biologist(s), the SJKF has escaped from the partially excavated den. SJKF dens shall be carefully excavated until it is certain no individuals of SJKF are inside. Dens shall be fully excavated, filled with dirt and compacted to ensure that SJKF cannot reenter or use the den during O&M Covered Activities. If an individual SJKF does not vacate a den within the O&M Work Area(s) within a reasonable timeframe, Permittee shall contact USFWS and CDFW and get written guidance (e mail will suffice) from both agencies prior to proceeding with den excavation.	ITP Condition #8.51	Operations & Maintenance	Permittee and Designated Biologist(s)	
146	<u>O&M SJKF Den Replacement.</u> Within 30 days of fully excavating a den, filling it with dirt, and compacting it (see Condition of Approval 8.51), Permittee shall replace each excavated known, active, and natal den in the O&M Work Area(s) with an artificial den to compensate for the loss of important shelter used by SJKF for protection, reproduction, and escape from predators in accordance with the CDFW-approved SJKF Den Replacement Plan (see Condition of Approval 8.15.4).	ITP Condition #8.52	Operations & Maintenance	Permittee	

147	<u>O&M Soil Stockpiles.</u> Permittee shall ensure that soil stockpiles in the O&M Work Area(s) are placed where soil will not pass into potential CTS breeding pools or into any other "Waters of the State," in accordance with Fish and Game Code section 5650. Permittee shall appropriately protect stockpiles to prevent soil erosion.	ITP Condition # 8.53	Operations & Maintenance	Permittee	
148	<u>O&M Vehicle Access.</u> Permittee shall ensure all O&M Covered Activities are conducted utilizing access routes developed specifically for ingress and egress access to the Work Area(s). In the event emergency response requires vehicular access through areas outside of the Work Area(s), Permittee shall notify CDFW within 48 hours by calling the Regional Office at (559) 243-4005.	ITP Condition #8.54	Post-construction	Permittee	
149	<u>O&M Materials Inspection.</u> Workers shall thoroughly inspect for Covered Species in all construction pipe, culverts, or similar structures with a diameter of 7.6 centimeters (three inches) or greater that are stored for one or more overnight periods before the structure is subsequently moved, buried, or capped. If during inspection one of these animals is discovered inside the structure, workers shall notify the Designated Biologist(s) and allow the Covered Species to safely escape that section of the structure before moving and utilizing the structure.	ITP Condition #8.55	Operations & Maintenance	Permittee and Designated Biologist(s)	
150	<u>O&M Equipment Inspection.</u> Workers shall inspect for Covered Species under vehicles and equipment at the O&M Work Area(s) before the vehicles and equipment are moved. If a Covered Species is present, the worker shall notify the Designated Biologist(s) and wait for the Covered Species to move unimpeded to a safe location. Alternatively, the Permittee shall contact the Designated Biologist(s) to determine if the Designated Biologist(s) can safely move the Covered Species out of harm's way in compliance with the ITP.	ITP Condition #8.56	Operations & Maintenance	Permittee and Designated Biologist(s)	

151	<p><u>O&M Daily Entrapment Inspections.</u> The Designated Biologist(s) shall inspect all open holes, sumps, and trenches within each O&M Work Area at the beginning, middle, and end of each day for trapped Covered Species. All trenches, holes, sumps, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope and that are between two- and eight feet deep shall be covered when workers or equipment are not actively working in the excavation, which includes cessation of work overnight, or shall have an escape ramp of earth or a non-slip material with a less than 1:1 (45 degree) slope. All trenches, holes, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope and greater than eight feet deep shall be covered when workers or equipment are not actively working in the excavation and at the end of each work day. To prevent inadvertent entrapment of Covered Species or any other animals, the Designated Biologist(s) shall oversee the covering of all excavated, trenches, holes, sumps, or other excavations with a greater than 1:1 (45 degree) slope of any depth with barrier material (such as hardware cloth) at the close of each working day such that Covered Species are unable to dig or squeeze under the barrier and become entrapped. The outer two feet of excavation cover shall conform to solid ground so that gaps do not occur between the cover and the ground and secured with soil staples or similar means to prevent gaps. Each morning, mid-day, the end of each day (including weekends and any other non-work days), and immediately before trenches, holes, sumps, or other excavations are back-filled, the Designated Biologist(s) shall thoroughly inspect them for trapped Covered Species. Trenches, holes, sumps, or other excavations that are covered long-term shall be inspected at the beginning of each working day to ensure inadvertent entrapment has not occurred. If any worker discovers that Covered Species have become trapped, Permittee shall cease all Covered Activities in the vicinity and notify the Designated Biologist(s) immediately. Project workers and the Designated Biologist(s) shall allow the Covered Species to escape unimpeded if possible before Covered Activities are allowed to continue, or, if the Covered Species is CTS, the Designated Biologist(s) shall capture and relocated the animal as per the CTS Salvage and Relocation Plan described in Condition of Approval 8.13.1.</p>	ITP Condition #8.57	Operations & Maintenance	Permittee and Designated Biologist(s)	
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SECTION II – Master Streambed Alteration Agreement

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
BEFORE DISTURBING SOIL OR VEGETATION					
1	Permittee shall notify CDFW if Permittee determines or learns that a Protective Measure in the Agreement might conflict with a provision imposed on a Covered Activity by another local, State, or Federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.	MSAA Administrative Measure 1.3	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
2	Prior to starting any Covered Activity, Permittee shall provide all workers with training from a qualified individual on the contents of this Agreement, the corresponding Subnotification, any amendments or extensions, the resources at stake, and the legal consequences of non-compliance.	MSAA Administrative Measure 1.9	Before commencing ground- or vegetation-disturbing activities	Permittee	
3	Prior to conducting any Covered Activity, Permittee shall identify the limits of the Work Site. Permittee shall identify the Work Site with brightly-colored flagging/fencing and limit work to these defined areas only. Permittee shall maintain flagging/fencing in good repair for the duration of Covered Activities at that particular Work Site. All CDFW jurisdictional areas beyond the Work Site shall be considered Ecologically Sensitive Areas (ESA) and shall not be disturbed.	MSAA Avoidance and Minimization Measure 2.2	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
4	<p>Permittee shall compensate for tree and shrub removal from the Fresno River, Main Canal, and Cottonwood Creek Work Sites by planting replacement trees and shrubs at the replacement rates described in Avoidance and Minimization Measure 2.5(a) within the 3-acre riparian habitat restoration site at the Lazy K Ranch on the south bank of the Chowchilla River and through the acquisition and management of those 3 acres at the Lazy K Ranch as Habitat Management lands (HM lands).</p> <p>As part of the Management Plan for the HM lands on the Lazy K Ranch, as required by Compensatory Measure 3.2(a)5, Permittee shall include sufficient detail to address the replacement plantings of trees and shrubs, including measures to be taken to ensure a performance criterion of 70 percent survival of plantings for a minimum period of five (5) consecutive years, including up to three (3) years with supplemental irrigation, and a minimum of two (2) years without such assistance. The Management Plan shall propose the planting location(s) and include requirements for annual monitoring, intermediate performance criteria, and remedial actions in the event that plantings are not successful. Any subsequent planting after the initial planting shall start a new minimum 5-year monitoring and reporting requirement for the new plantings. Permittee shall submit to CDFW an annual report of the progress of the replacement plantings, including any problems reaching intermediate performance criteria and any remedial action completed during the last year or planned during the following year. CDFW will provide written documentation when it has determined that replacement plantings have been successfully established.</p>	MSAA Compensatory Measure 3.1(a)	<p>Before commencing ground- or vegetation-disturbing activities /</p> <p>Entire Project</p>	Permittee	
5	<p>Permittee shall compensate for impacts to CDFW jurisdictional areas at the San Joaquin River Construction Activity Work Site through the acquisition and management of 1.5 acres of Habitat Management lands (HM lands) at a CDFW-approved location on the San Joaquin River between State Route 99 and the Friant Dam. The HM lands shall support or be capable of supporting native riparian vegetation that can be further enhanced through management.</p> <p>Permittee shall complete restoration or enhancement of the HM lands, as deemed warranted by CDFW, in order to create or enhance riparian vegetation. As part of the Management Plan for the HM lands at the San Joaquin River site, as required by Compensatory Measure 3.2(a)5, Permittee shall include sufficient detail to address planting of trees and shrubs removed from the San Joaquin River Construction Activity Work Site per the replacement rates described in Avoidance and Minimization Measure 2.5(a), any additional required tree and understory plantings for habitat creation, maintenance of native-dominant riparian habitat during and after establishment, monitoring to determine the success of plantings, success criteria during the establishment phase that consist of percent cover of different vegetation strata, and remedial actions to be taken if success criteria are determined to not be on track to being met. If CDFW determines that the HM lands selected already consist of riparian vegetation that does not require additional riparian habitat creation, the Management Plan shall still include the requirements for replacement planting, including success criteria, remedial actions, and reporting as described in Compensatory Measure 3.1(a).</p>	MSAA Compensatory Measure 3.1(b)	<p>Before commencing ground- or vegetation-disturbing activities /</p> <p>Entire Project</p>	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
6	Permittee shall provide for the permanent protection and management of 3 acres of riparian habitat at the Lazy K Ranch on the Chowchilla River (per Compensatory Measure 3.1(a)) and 1.5 acres of riparian habitat on the San Joaquin River (per Compensatory Measure 3.1(b)) by completing the transfer of fee title or conservation easement to CDFW pursuant to terms approved by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a special district, non-profit organization, for-profit entity, person, or other entity to hold title or conservation easement to the property provided that the district, organization, entity, or person meets the requirements of Government Code section 65965, et seq., as amended. Permanent protection and perpetual management of compensatory habitat must be complete within 18 months of the date on which the first Subnotification submitted pursuant to this Agreement is deemed complete by CDFW.	MSAA Compensatory Measure 3.2	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
7	Permittee shall transfer fee title to the HM lands to CDFW pursuant to terms approved by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a special district, non-profit organization, for-profit entity, person, or other entity to hold title to the property provided that the district, organization, entity, or person meets the requirements of Government Code section 65965 et seq., as amended. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW does not hold the conservation easement, CDFW shall be named as a third-party beneficiary. Permittee shall obtain written CDFW approval of any conservation easement before its recordation.	MSAA Compensatory Measure 3.2(a)1	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
8	Permittee shall obtain CDFW approval of the HM lands before acquisition and/or transfer of the land by submitting, at least three (3) months before acquisition and/or transfer of the HM lands, a formal Proposed Lands for Acquisition Form (see Attachment 5) identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts to habitat.	MSAA Compensatory Measure 3.2(a)2	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
9	Permittee shall provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents (see Attachment 6). All documents conveying the HM lands and all conditions of title are subject to the approval of CDFW, and if applicable, the Wildlife Conservation Board and the Department of General Services.	MSAA Compensatory Measure 3.2(a)3	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
10	Permittee shall designate an interim and long-term land manager approved by CDFW. The land manager may be the conservation easement grantee, land owner, or other party. Documents related to land management shall identify the land manager. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the mitigation land, CDFW will also act as long-term land manager unless otherwise specified.	MSAA Compensatory Measure 3.2(a)4	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
11	Permittee shall provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval (see http://www.dfg.ca.gov/habcon/conplan/mitbank/); (2) conducting a baseline biological assessment and land survey report within four (4) months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage.	MSAA Compensatory Measure 3.2(a)5	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
12	Permittee shall provide for the interim management of the HM lands. The interim management period shall be a minimum of three (3) years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected annual management (described in the final management plan) following start-up activities. Interim management period activities include fence repair, continuing trash removal, site monitoring, vegetation and invasive species management, and potentially a grazing plan, depending on-site conditions. Permittee shall either (1) demonstrate to CDFW that funding is available for the minimum of three (3) years of interim management that the land owner, Permittee, or land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with instructions to pay the land manager annually in advance, (3) establish a short-term enhancement sub-account with the National Fish and Wildlife Foundation (NFWF) for annual payment to the land manager, or (4) establish a short-term enhancement account with CDFW for annual payment to the land manager.	MSAA Compensatory Measure 3.2(a)6	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
13	<u>Endowment Fund</u> . After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the in-perpetuity management of the HM lands by establishing a long-term management fund (Endowment Fund). The Endowment Fund is a sum of money held in a CDFW-authorized fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plan(s) required by Compensatory Measure 3.2(a)5. Endowment Fund as used in the Agreement shall refer to the endowment deposit and all interest, dividends, other earnings, additions, and appreciation thereon.	MSAA Compensatory Measure 3.2(b)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
14	The Endowment Fund shall be held by CDFW or a CDFW-approved fund manager.	MSAA Compensatory Measure 3.2(b)1	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
15	After obtaining CDFW approval of the HM lands, long-term Management Plan, and Endowment Fund Manager, Permittee shall prepare a Property Analysis Record (PAR) or PAR-equivalent analysis (hereinafter "PAR"), to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Fund Manager.	MSAA Compensatory Measure 3.2(b)2	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
16	Permittee shall obtain the capitalization rate from the selected Endowment Fund Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees	MSAA Compensatory Measure 3.2(b)2i	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
17	Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment Fund. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events. The endowment shall be established assuming spending will not occur for the first three (3) years after full funding. For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Fund Manager and CDFW.	MSAA Compensatory Measure 3.2(b)2ii	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
18	Permittee shall transfer the long-term endowment funds to the CDFW-approved Endowment Fund Manager upon CDFW approval of the Endowment Deposit Amount..	MSAA Compensatory Measure 3.2(b)3	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
19	Permittee shall reimburse CDFW for all reasonable expenses incurred by CDFW such as transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other State agency reviews, and overhead related to transfer of HM lands to CDFW.	MSAA Compensatory Measure 3.2(c)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
DURING CONSTRUCTION					
20	Permittee shall make the Agreement, the approved Subnotification (or Subnotification submitted to CDFW, if CDFW did not respond within the review period), any extensions and amendments to the Agreement, and all related notification materials, and California Environmental Quality Act (CEQA) documents readily available at the Work Site at all times and shall be presented to CDFW personnel or personnel from another State, Federal, or local agency upon request.	MSAA Administrative Measure 1.1(a)	Entire Project	Permittee	
21	Permittee shall ensure that a representative of Permittee is present during Covered Activities to oversee and verify that work is conducted in compliance with the Agreement, the approved Subnotification (or Subnotification submitted to CDFW, if CDFW did not respond within the review period), and any extensions and amendments to the Agreement.	MSAA Administrative Measure 1.1(b)	Entire Project	Permittee	
22	Permittee shall ensure that copies of the Agreement, approved Subnotification (or Subnotification submitted to CDFW, if CDFW did not respond within the review period), and any extensions and amendments to the Agreement are provided to all persons who will be working at the Work Site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.	MSAA Administrative Measure 1.2	Entire Project	Permittee	
23	Permittee agrees that CDFW personnel may enter Work Sites to verify compliance with the Agreement. Permittee shall provide CDFW entry to any Work Site following a minimum 24 hours' notice.	MSAA Administrative Measure 1.4	Entire Project	Permittee	
24	The Agreement does not exempt Permittee from complying with all other applicable local, State, and Federal law, or other legal obligations.	MSAA Administrative Measure 1.5	Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
25	The Agreement does not authorize the "take" ("take" is defined in FGC Section 86 as to hunt, pursue, catch, capture, or kill; or attempt to hunt, pursue, catch, capture, or kill) of State- or Federally-listed threatened or endangered species. Any such "take" shall require separate permitting as may be required.	MSAA Administrative Measure 1.6	Entire Project	Permittee	
26	To the extent that the Protective Measures of the Agreement provide for activities that require Permittee to enter on another owner's property, they are agreed to with the understanding that Permittee possesses the legal right to so enter.	MSAA Administrative Measure 1.7	Entire Project	Permittee	
27	To the extent that the Protective Measures of the Agreement provide for the diversion of water, they are agreed to with the understanding that Permittee possesses the legal right to divert such water.	MSAA Administrative Measure 1.8	Entire Project	Permittee	
28	Permittee shall conduct Covered Activities during daylight hours only (sunrise to sunset) except for equipment maintenance, security patrols, and emergency (defined by an imminent threat to life or significant property) activities. Permittee shall notify CDFW as soon as possible and no later than 24 hours after commencement of any emergency nighttime activities. Permittee shall not use permanent or temporary, fixed, exterior lighting, including motion-triggered security lighting that casts light beyond the construction footprint of Covered Activities within CDFW jurisdiction between sunset and sunrise.	MSAA Avoidance and Minimization Measure 2.1	Entire Project	Permittee	
29	The Agreement does not allow for the "take" of any State- or Federally-listed threatened or endangered species. Liability for any "take" of such listed species remains the separate responsibility of Permittee for the duration of all Covered Activities. The Agreement also does not allow for the "take" of any fully protected species as defined by State law (see FGC Sections 3511, 4700, 5050, and 5515.).	MSAA Avoidance and Minimization Measure 2.3(a)	Entire Project	Permittee	
30	Permittee affirms that no "take" of listed species is authorized beyond that described in Incidental Take Permit number 2081-2013-025-04 (ITP); the US Fish and Wildlife Service (USFWS) Biological Opinion of the California High-Speed Train System: Merced to Fresno Section Project, Merced, Madera, and Fresno Counties (Biological Opinion No. 08ESMF00-2012-F-0248, or as amended if applicable); and the National Marine Fisheries Service (NMFS) Biological and Conference Opinion on the High-Speed Train: Merced – Fresno action (File Number 151422SWR2011SA00573 (TN/2011/05794)), pursuant to the Federal Endangered Species Act. "Take" of any State- or Federally-listed threatened or endangered species that is inconsistent with either Biological Opinion(s) or the ITP, and "take" of any fully protected species, is prohibited. Permittee shall take prudent measures to ensure that all unpermitted "take" is avoided.	MSAA Avoidance and Minimization Measure 2.3(b)	Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
31	The area covered by the Agreement provides habitat for special status wildlife and plant species in addition to the listed species covered by the ITP. Any Covered Activities proposed and conducted under the Agreement shall at a minimum be consistent with the biological mitigation measures required by the Authority through its approval of the California High-Speed Train Project and related certification of the EIR/EIS (Attachment 4), except where those conflict with the ITP, any additional Protective Measures in the Agreement, or any Protective Measures proposed by Permittee or included by CDFW in an approved Subnotification. Where conflict occurs, the provisions of the ITP, Agreement, and Subnotifications prevail over mitigation measures in the EIR/EIS.	MSAA Avoidance and Minimization Measure 2.3(c)	Entire Project	Permittee	
32	Permittee shall immediately notify CDFW of the discovery of any special status wildlife and plant species, fully protected species, threatened species, or endangered species prior to and/or during Covered Activity implementation.	MSAA Avoidance and Minimization Measure 2.3(d)	Entire Project	Permittee	
33	The State endangered succulent owl's clover (<i>Castilleja campestris succulenta</i>), hairy orcutt grass (<i>Orcuttia pilosa</i>), and San Joaquin Valley orcutt grass (<i>Orcuttia inaequalis</i>) are not covered by the ITP but have the potential of occurring in areas covered by the Agreement. If suitable habitat is present within the Work Site of Covered Activities proposed in a Subnotification, a qualified botanist shall conduct focused Plant Surveys for these plants. Repeated floristic surveys shall be conducted by a qualified botanist multiple times during the appropriate floristic period(s) in order to adequately assess the potential Project-related impacts to listed plant species. Permittee shall submit the results to CDFW for review and written approval in advance of commencing the Covered Activities (Permittee may submit survey results to CDFW prior to Permittee's submittal of the Subnotification). If any listed plant species is found, Permittee shall identify them with flagging and avoid with a 25-foot no disturbance buffer, or take alternative protective action proposed by Permittee and approved by CDFW in writing and in advance of commencing the Covered Activity. Alternatively, Permittee may apply for and acquire an Incidental Take Permit for the plant species or request amendment of the ITP to include the plant species.	MSAA Avoidance and Minimization Measure 2.3(e)	Entire Project	Permittee	
34	Permittee shall allow any species designated as State species of special concern to move out of a Work Site of its own volition. Alternately, a qualified biologist who holds a Scientific Collecting Permit for the species shall move the individual(s) out of harm's way to the nearest area of suitable habitat at least 100 feet from the Work Site.	MSAA Avoidance and Minimization Measure 2.3(f)	Entire Project	Permittee	
35	If any fish or wildlife is encountered during the course of Covered Activities, Permittee shall allow said fish and wildlife to leave the Work Site unharmed.	MSAA Avoidance and Minimization Measure 2.4(a)	Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
36	For Project activities in the San Joaquin River that will require dewatering or diverting of water from the Work Site, Permittee shall complete all ground disturbance to install diversions and complete dewatering outside of the October 15 to June 15 breeding period for listed and sensitive status salmonids. If Covered Activities are completed between October 15 and June 15, Permittee shall wait to remove dewatering and diversion infrastructure, and to complete any restoration of the temporarily-disturbed portion to the Work Site to pre-activity conditions, until after June 15 and before October 15.	MSAA Avoidance and Minimization Measure 2.4(b)	Entire Project	Permittee	
37	When any dam or other artificial obstruction is being constructed, maintained, or placed in operation to implement a Covered Activity, sufficient water shall at all times be allowed to pass downstream to maintain aquatic life below the dam, and to keep in good condition any fish that may be planted or exist below the dam, pursuant to FGC Section 5937.	MSAA Avoidance and Minimization Measure 2.4(c)	Entire Project	Permittee	
38	At no time shall the entire flow of the San Joaquin River be blocked or rerouted, if fish could be prevented or impede the passing of fish either upstream or downstream past the Work Site.	MSAA Avoidance and Minimization Measure 2.4(d)	Entire Project	Permittee	
39	Pursuant to FGC Sections 3503 and 3503.5, it is unlawful to "take," possess, or needlessly destroy the nest or eggs of any bird or bird-of-prey. To protect nesting birds, no Covered Activity shall be completed from February 15 through July 31 unless a qualified biologist completes the following Avian Nesting Surveys within 30 days prior to commencing the Covered Activity. Permittee shall survey for nesting activity of raptors within a 500-foot radius of the Work Site. Surveys shall occur at appropriate nesting times and concentrate on trees and other habitat features with the potential to support raptor nests. If any active nests are observed, Permittee shall designate these nests and nest trees an ESA and protect them with a minimum 500-foot buffer until young have fledged and are no longer reliant on the nest site or parental care. Permittee shall Survey for nesting activity within a 250-foot radius of the defined Work Site. If any nesting activity is found, these nests shall be designated an ESA and protected with a minimum 250-foot buffer until young have fledged and are no longer reliant on the nest site or parental care. CDFW may consider variances from these buffers when there is a compelling biological or ecological reason to do so, such as when the Work Site would be concealed from a nest site by topography.	MSAA Avoidance and Minimization Measure 2.4(e)	Entire Project	Permittee	
40	All pipes with inside diameter of 4 inches or greater shall be capped or otherwise covered prior to being left overnight. If an animal is found in a pipe, the pipe shall be avoided and the animal(s) left to leave of their own accord. If a listed species is found occupying any pipe, all potentially disturbing activities shall be suspended immediately. Work shall not resume without CDFW written concurrence.	MSAA Avoidance and Minimization Measure 2.4(f)	Entire Project	Permittee	
41	All trenches, holes, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope and that are between 2 and 8 feet deep shall be covered when workers or equipment are not actively working in the excavation or shall have an escape ramp of earth or a non-slip material with a 1:1 (45 degree) slope or flatter.	MSAA Avoidance and Minimization Measure 2.4(g)	Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
42	All trenches, holes, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope and greater than 8 feet deep shall be covered when workers or equipment are not actively working in the excavation and at the end of each work day.	MSAA Avoidance and Minimization Measure 2.4(h)	Entire Project	Permittee	
43	A qualified biologist shall inspect all excavations (covered or open) for entrapped wildlife at the beginning, middle, and end of each day until the excavation is backfilled, including weekends and any other non-work days.	MSAA Avoidance and Minimization Measure 2.4(i)	Entire Project	Permittee	
44	A qualified biologist shall inspect all excavated holes and trenches for entrapped wildlife immediately before the excavation is backfilled.	MSAA Avoidance and Minimization Measure 2.4(j)	Entire Project	Permittee	
45	The outer 2 feet of excavation covers shall conform to solid ground so that gaps do not occur between the cover and the ground. Covering such gaps with dirt or laying covers on excavated soil will not satisfy this requirement. The outer 2 feet of cover material shall be semi-rigid and secured to the ground to preclude wildlife from lifting the edge (hardware cloth shall be used unless another material is approved by CDFW). The edges of the covers shall be secured with re-bar, minimum 10-inch soil staples, or similar means every 12 inches to prevent wildlife from lifting the edges.	MSAA Avoidance and Minimization Measure 2.4(k)	Entire Project	Permittee	
46	Permittee shall document the number and species of all woody-stemmed plants in excess of four (4) inches diameter at breast height (DBH) that will be cut, chemically treated, or otherwise removed or are damaged during Covered Activities. Permittee shall replace trees and shrubs with a DBH of four (4) inches or greater that are damaged or removed, by replanting appropriate native species at a 3:1 ratio (replaced to lost), except that heritage trees 24 inches or greater in DBH shall require replanting of like species at a 10:1 ratio (see Compensatory Measure 3.1(a) and (b)).	MSAA Avoidance and Minimization Measure 2.5(a)	Entire Project	Permittee	
47	Prior to initiation of any Covered Activity, Permittee shall identify and clearly mark all trees to be cut, chemically treated, or otherwise removed, to avoid accidentally removing trees that should not otherwise be affected.	MSAA Avoidance and Minimization Measure 2.5(b)	Entire Project	Permittee	
48	Vegetation removal shall not exceed the minimum necessary to complete Covered Activities and shall only occur within the Work Site. Permittee shall restore the temporarily-disturbed portions of CDFW jurisdictional areas to as near their original condition as possible.	MSAA Avoidance and Minimization Measure 2.5(c)	Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
49	Permittee shall dispose of vegetation or other material removed from a Work Site at an appropriate and legal off-site location where the material cannot enter the stream channel. No such material shall be stockpiled in the streambed, banks, or channel, except that native vegetation removed from the channel may be chipped and the chips used as mulch for disturbed soil sites in or near Work Sites.	MSAA Avoidance and Minimization Measure 2.5(d)	Entire Project	Permittee	
50	Permittee shall remove all disturbed non-native plant species from Work Sites. Permittee shall not use non-native plant species in mulching, composting, or otherwise placing in or around the Work Site. Permittee shall ensure that heavy equipment and other machinery is inspected for the presence of undesirable species and is cleaned prior to on-site use, to reduce the risk of introducing non-native plant species into the Work Site.	MSAA Avoidance and Minimization Measure 2.5(e)	Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
51	<p>If a Covered Activity cannot be completed when the Work Site is naturally dry, Permittee shall develop a Diversion Plan or Dewatering Plan and submit to CDFW for approval with the Subnotification. The Plan shall include but not be limited to the following:</p> <ul style="list-style-type: none"> When work in a flowing stream is unavoidable, Permittee shall divert the entire stream flow around or through the Work Site by a barrier, temporary diversion channel, and/or other means. The diversion shall allow stream flows to gravity flow around or through the Work Site, or stream flow shall be pumped around the Work Site using pumps and hoses. Permittee shall clearly identify the locations of the upstream and downstream diversion points. Construction of the barrier and/or the new channel shall normally begin in the downstream area and continue in an upstream direction, and the diversion shall only be implemented when construction of the diversion is completed. Diversion channel and barrier construction shall be adequate to prevent seepage into or from the Work Site. Channel barriers shall only be made of earth or other substances subject to erosion if first enclosed by sheet piling, rock riprap, or other protective material. Permittee shall place trench material from stream channels outside the stream's ordinary high water mark or on dry portions within the stream's ordinary high water mark when the material is placed on filter fabric. Permittee shall remove the barrier and supportive material promptly when the work is completed, except as specified in Avoidance and Minimization Measure 2.4(b) for Covered Activities on the San Joaquin River. Barrier removal shall proceed from downstream in an upstream direction. Flow diversion shall be done in a manner to prevent pollution and/or siltation, and to provide flows to downstream reaches. Flows to downstream reaches shall be provided during all times that the natural flow would have supported aquatic life; said flows shall be of sufficient quality and quantity, and of appropriate temperature to support aquatic life, both above and below the diversion. Normal flows shall be restored to the affected stream immediately upon completion of work at that location. Permittee shall implement dewatering in a manner that is not harmful to fish or other aquatic or semi-aquatic wildlife: the suction end of the intake pipe shall be fitted with fish screens intended to prevent entrainment or impingement of small fish: (http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp). Any turbid water pumped from the Work Site, including water pumped to maintain all or a portion of the Work Site in a dewatered state, shall be placed in a settling pool to allow the sediment to drop out. Once the water is clear, it shall be returned to the stream to maintain water flow. Settling pools, including all fill enclosure material, and trapped sediments, shall be removed when the Covered Activity is completed. 	MSAA Avoidance and Minimization Measure 2.6	Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
52	If a Covered Activity will require dewatering or diversion of water to create dry conditions and fish are or may be present within the Work Site, Permittee shall develop a Fish Rescue Plan and submit to CDFW for approval with the Subnotification. The Fish Rescue Plan shall include, but not be limited to, the name(s) of the qualified fisheries biologist(s) who will handle the fish, a list of the State and Federal permits possessed by the qualified biologist(s) to handle the fish, the method(s) of fish capture to be used, identification of the relocation site(s) for captured fish, the method(s) used for transporting the rescued fish to the relocation site(s), and the method(s) used for minimizing the risk of stress and mortality due to capture and handling of the fish.	MSAA Avoidance and Minimization Measure 2.7(a)	Entire Project	Permittee	
53	Permittee shall maintain a record of all fish rescued and moved for Covered Activities included in each Subnotification. The record shall include, at a minimum, the date of capture and of relocation, the method of capture, location of relocation in relation to the Project site, and the number and type of fish captured and relocated. Permittee shall include any fish rescue records in the next annual report submitted to CDFW.	MSAA Avoidance and Minimization Measure 2.7(b)	Entire Project	Permittee	
54	When any dam or other artificial obstruction is being constructed, maintained, or placed in operation to implement a Covered Activity, sufficient water shall at all times be allowed to pass downstream to maintain aquatic life below the dam, and to keep in good condition any fish that may be planted or exist below the dam, pursuant to FGC Section 5937.	MSAA Avoidance and Minimization Measure 2.8	Entire Project	Permittee	
55	Permittee shall not operate vehicles within surface water of a Work Site. When necessary to complete a Covered Activity, Permittee shall only operate vehicles between the banks of any stream during dry conditions.	MSAA Avoidance and Minimization Measure 2.9(a)	Entire Project	Permittee	
56	Permittee shall limit construction vehicle access to stream banks and beds to predetermined ingress and egress corridors from existing roads. All other areas adjacent to a Work Site shall be an ESA and shall remain off-limits to vehicles and equipment.	MSAA Avoidance and Minimization Measure 2.9(b)	Entire Project	Permittee	
57	During Covered Activities, Permittee shall check and maintain daily any equipment or vehicles driven and/or operated within or adjacent to a stream to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic and terrestrial life.	MSAA Avoidance and Minimization Measure 2.9(c)	Entire Project	Permittee	
58	Permittee shall locate staging and storage areas for equipment, materials, fuels, lubricants, and solvents outside of the stream and adjacent vegetation. For stationary equipment located within or adjacent to a stream, such as motors, pumps, generators, compressors and welders, Permittee shall ensure the continuous use of drip-pans or other containment. Permittee shall move vehicles away from the stream prior to refueling and lubrication.	MSAA Avoidance and Minimization Measure 2.9(d)	Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
59	Permittee confirms that any and all structures and constructed features shall be properly aligned and otherwise engineered, installed, and maintained to accommodate high flows, to assure resistance to washout and to erosion of the stream bed, banks, and/or fill, and that they will not cause long-term changes in water flows that adversely modify the existing upstream or downstream stream bed/bank contours or increase sediment deposition.	MSAA Avoidance and Minimization Measure 2.10	Entire Project	Permittee	
60	Permittee shall provide with any subnotification final site plans, with documentation from a registered and licensed civil engineer that the structures and other constructed features are designed to accommodate and withstand 100-year flood events, including hydrologic studies to ensure appropriate sizing of structures in order to adequately convey flows while avoiding any impacts to the channel morphology. For structures proposed in a stream with one or more existing culvert(s) or other constructed structures, the documentation that Permittee provides shall address cumulative hydrological stream function for the entire stream.	MSAA Avoidance and Minimization Measure 2.10(a)	Entire Project	Permittee	
61	Permittee shall limit the installation of permanent, access-restricted fencing to areas above the stream's ordinary high water mark, outside of the active, wetted channel.	MSAA Avoidance and Minimization Measure 2.10(b)	Entire Project	Permittee	
62	Spoil storage sites shall not be located within any stream, or where spoil will be washed into a stream. Rock, gravel, and/or other materials shall not be imported into or moved within the stream bed or banks, except as otherwise addressed in the Agreement.	MSAA Avoidance and Minimization Measure 2.11(a)	Entire Project	Permittee	
63	Permittee shall limit fill to the minimal amount necessary to accomplish the Covered Activities, and move excess fill material off-site at Covered Activity completion.	MSAA Avoidance and Minimization Measure 2.11(b)	Entire Project	Permittee	
64	Permittee shall not engage in Covered Activities during or within 24 hours following significant rainfall events (1/4-inch in any 24-hour period), or when there is water present (except in compliance with a Diversion Plan or a Dewatering Plan, see Avoidance and Minimization Measure 2.6 above).	MSAA Avoidance and Minimization Measure 2.12(a)	Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
65	Permittee shall stabilize all disturbed soils to reduce erosion potential both during and following Covered Activities. Permittee may use temporary erosion control devices, such as straw bales, silt fencing, and sand bags, as appropriate, to prevent siltation of CDFW jurisdictional areas. To minimize the risk of ensnaring and strangling wildlife, coir rolls, erosion control mats or blankets, straw or fiber wattles, or similar erosion control products shall be composed entirely of natural-fiber, biodegradable materials. Permittee shall not use "photodegradable" or other plastic erosion control materials.	MSAA Avoidance and Minimization Measure 2.12(b)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
66	Permittee's ability to minimize siltation shall be the subject of preconstruction planning and feature implementation. Precautions to minimize siltation may require that the Work Site be isolated so that silt or other deleterious materials are not allowed to pass to downstream reaches. If it is determined that silt levels resulting from a Covered Activity constitute a threat to aquatic life, activities associated with the siltation shall be halted until effective CDFW-approved control devices are installed, or abatement procedures are initiated.	MSAA Avoidance and Minimization Measure 2.12(c)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
67	Permittee shall not dump any litter or construction debris within CDFW jurisdictional areas. Permittee shall pick up all such debris and waste daily and dispose of it properly at an appropriate off-site location. Permittee shall remove all materials used in Covered Activities from the stream and from areas where such materials could be washed into the stream.	MSAA Avoidance and Minimization Measure 2.13(a)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
68	Permittee shall prevent raw cement, concrete or washings thereof; asphalt; drilling fluids or lubricants; paint or other coating material; oil or other petroleum products; or any other substances that could be hazardous to fish or wildlife resulting from or disturbed by Covered Activities, from contaminating the soil and/or entering a stream.	MSAA Avoidance and Minimization Measure 2.13(b)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
69	Permittee is aware that it, and any contractors, remains subject to FGC Section 5650 and 12015, which are related to water pollution.	MSAA Avoidance and Minimization Measure 2.13(c)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
70	Permittee shall install the necessary containment structures to control the placement of wet concrete and to prevent it from entering into the channel outside of those structures. Permittee shall maintain secondary containment in addition to forms that are used to hold the shape of the concrete while it dries. No concrete shall be poured below the top of the bank if the 10-day National Weather Service weather forecast indicates any chance of rain. At all times when Permittee is pouring or working with wet concrete there shall be a designated monitor to inspect the containment structures and ensure that no concrete or other debris enters into the channel outside of those structures. Poured concrete shall remain isolated from surface waters and allowed to dry/cure within the containment area for a minimum of 30 days. CDFW may provide written approval of a variance to the curing time in this measure if Permittee either 1) demonstrates that the concrete will not come into direct contact with surface water or soils as a result of Project design features, or 2) monitors the pH of new concrete relative to the baseline, pre-Project pH of the Work Site, until it decreases to a level approved in advance by CDFW. No variance shall be implemented unless CDFW has provided approval in writing and in advance.	MSAA Avoidance and Minimization Measure 2.13(d)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
71	Permittee shall submit for CDFW written approval an Emergency Response Plan with the Subnotification submitted for Covered Activities under the Agreement. Permittee shall keep the Plan on-site during all Covered Activities. The Plan shall identify the actions that shall be taken in the event of a spill of petroleum products, contaminated soil, or other material harmful to fish, plants, or aquatic life. Emergency response materials shall be kept at Work Sites and readily available to allow rapid containment and cleanup of any spilled material. The cleanup of all spilled materials shall begin immediately. Permittee shall contact CDFW within 24 hours of any hazardous material spill, including but not limited to petroleum products.	MSAA Avoidance and Minimization Measure 2.13(e)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
72	Permittee shall ensure that benign material is used in the drilling muds, to avoid contamination of any water or habitat. At no time shall drill cuttings, drilling mud, and/or materials or water contaminated with bentonite or any other substance deemed deleterious to fish or wildlife be allowed to enter the stream or be placed where they may be washed into the stream. Any contaminated water/materials from the drilling and/or Project activities shall be pumped or placed into a holding facility and removed for proper disposal.	MSAA Avoidance and Minimization Measure 2.14(a)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
73	Drilling shall not occur adjacent to instream structures, such as pilings. If instream structures are present, the bore shall be deep enough to minimize frac-out potential.	MSAA Avoidance and Minimization Measure 2.14(b)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
74	Permittee shall ensure that the drilling contractor has a minimum of two (2) years' experience in conducting horizontal directional drilling operations, and that the contractor utilizes inspectors that have completed training, such as the two-day directional drilling course provided by the California Department of Transportation (Caltrans) or Baroid Industrial Drilling Products, Inc.	MSAA Avoidance and Minimization Measure 2.14(c)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
75	Inspectors shall be on-site throughout drilling activity, and shall conduct or oversee monitoring of the channel and adjacent habitats during drilling.	MSAA Avoidance and Minimization Measure 2.14(d)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
76	Permittee shall ensure that the quality and quantity of drilling fluid return is monitored. Pressure levels shall be monitored randomly and recorded by inspectors, and pressure levels shall be set at minimum feasible levels to prevent frac-out.	MSAA Avoidance and Minimization Measure 2.14(e)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
77	All inspectors shall have the responsibility and authority to make recommendations to the drilling operators and, if necessary, shut down operations if Permittee or drilling contractors are not following procedures that minimize frac-outs.	MSAA Avoidance and Minimization Measure 2.14(f)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
78	Permittee shall ensure continuous monitoring of the drilling operation to ensure that adequate protection controls have been installed. All field personnel shall be briefed on their responsibility for timely reporting of frac-out releases to the monitor on-site. At least one (1) person shall be specifically designated for the task of observing the stream from the crossing site to a minimum of 100 feet downstream to observe for locations of frac-out.	MSAA Avoidance and Minimization Measure 2.14(g)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
79	In the event of frac-out, all Project activity shall cease immediately, and containment and clean-up as described in an approved Frac-Out Contingency Plan shall commence immediately (see Avoidance and Minimization Measure 2.14(i)).	MSAA Avoidance and Minimization Measure 2.14(h)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	

	Protective Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
80	A Frac-Out Contingency Plan shall be submitted for approval with each Subnotification that includes Horizontal Directional Drilling. The approved Plan shall be on-site at all times and all contractors shall have pre-arranged duties in case of a frac-out. The Contingency Plan shall include but not be limited to name(s) and phone numbers of biological monitor(s) and crew supervisor(s); documentation of the experience of the boring contractor and the training of their inspector(s), site-specific resources of concern, including factors such as possible presence of sensitive species; monitoring protocols, including biological monitoring and frac-out monitoring; containment and cleanup plan, including staging location of vacuum trucks and equipment, equipment list, necessary hose lengths, number of sand bags and specifications on diverting flow around frac-out, etc.; and demonstration that the Permittee shall have full access from the Right of Way to the stream through gates that may be locked and maintained by any agency. Permittee shall ensure that all necessary equipment and personnel are on-site and prepared for immediate response in the event of frac-out.	MSAA Avoidance and Minimization Measure 2.14(i)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
81	If frac-out occurs, Permittee shall consult with CDFW for authorization to proceed with Project activity. Alternate Project methods and additional Protective Measures may be warranted.	MSAA Avoidance and Minimization Measure 2.14(j)	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
POST-CONSTRUCTION					
82	If Covered Activities cause any exposed slopes or other exposed areas, after Covered Activities are complete these areas shall be seeded (with weed-free straw or mulch) with a blend of a minimum of three (3) locally native grass species. One (1) or two (2) sterile non-native perennial grass species may be added to the seed mix provided that amount does not exceed 25 percent of the total seed mix by count. Locally native wildflower and/or shrub seeds may also be included in the seed mix. The seeding shall be completed as soon as possible after Covered Activity completion, no later than November 15 of the year the Covered Activity ends, or as approved in writing by CDFW. Permittee shall submit a seed mixture to CDFW for approval with the Subnotification for the corresponding Covered Activity. At the discretion of CDFW, all exposed areas where seeding is considered unsuccessful after 90 days shall receive appropriate soil preparation and a second application of seeding, straw, or mulch as soon as is practical on a date mutually agreed upon.	MSAA Compensatory Measure 3.1(c)	Post-construction	Permittee	
83	Where suitable vegetation cannot be reasonably expected to become established per Compensatory Measure 3.1(c), non-erodible materials shall be used for such stabilization. Any installation of non-erodible materials not described in the Subnotification shall be coordinated with CDFW. Coordination may include the negotiation of additional Agreement or Subnotification Protective Measures for this activity.	MSAA Compensatory Measure 3.1(d)	Post-construction	Permittee	

Attachment 3

Subnotification Completeness Checklist

<i>FOR DEPARTMENT USE ONLY</i>	<i>Date Received</i>	<i>Subnotification No.</i>
		1600-2013-0060-R4-

SUBNOTIFICATION COMPLETENESS CHECKLIST
California High-Speed Train Project
Merced to Fresno Section – Permitting Phase 1
Master Streambed Alteration Agreement

This checklist is to be completed by Permittee and submitted with the Subnotification form to facilitate the determination of completeness under the Master Streambed Alteration Agreement. For any item checked as "Not Included", please provide written justification. This information will aid in determining Subnotification completeness in accordance with Master Streambed Alteration Agreement section Notification and Approval Procedure 1.1(a) Completeness Determination.

Project Name: _____

Subnotification Form Item	Included	Not Included
Subnotification Fees	<input type="checkbox"/>	<input type="checkbox"/>
1. Permittee Information	<input type="checkbox"/>	<input type="checkbox"/>
2. Contact Person	<input type="checkbox"/>	<input type="checkbox"/>
3. Project Term	<input type="checkbox"/>	<input type="checkbox"/>
4. Type of Subnotification	<input type="checkbox"/>	<input type="checkbox"/>
5. Project Location		
Description of Project Location	<input type="checkbox"/>	<input type="checkbox"/>
Water Body (River, Stream, Lake)	<input type="checkbox"/>	<input type="checkbox"/>
USGS 7.5 Minute Quad Map	<input type="checkbox"/>	<input type="checkbox"/>
Assessor's Parcel Number	<input type="checkbox"/>	<input type="checkbox"/>
Coordinates	<input type="checkbox"/>	<input type="checkbox"/>
6. Project Category and Work Type	<input type="checkbox"/>	<input type="checkbox"/>
7. Project Description		
Description of Project	<input type="checkbox"/>	<input type="checkbox"/>
Final Site Plans	<input type="checkbox"/>	<input type="checkbox"/>
Equipment Used	<input type="checkbox"/>	<input type="checkbox"/>
Diversion or Dewatering Plan	<input type="checkbox"/>	<input type="checkbox"/>
8. Project Impacts		
Description (including linear feet and acreage)	<input type="checkbox"/>	<input type="checkbox"/>
Vegetation Impacts	<input type="checkbox"/>	<input type="checkbox"/>
Habitat Impacts (Type and Acreage)	<input type="checkbox"/>	<input type="checkbox"/>
Special Status species	<input type="checkbox"/>	<input type="checkbox"/>
EIR/EIS Mitigation Measures	<input type="checkbox"/>	<input type="checkbox"/>
Additional Protective Measures	<input type="checkbox"/>	<input type="checkbox"/>
Biological Study	<input type="checkbox"/>	<input type="checkbox"/>
Seed Mixture	<input type="checkbox"/>	<input type="checkbox"/>
Hydrological Study	<input type="checkbox"/>	<input type="checkbox"/>
Fish Rescue Plan	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Response Plan	<input type="checkbox"/>	<input type="checkbox"/>
Frac-Out Contingency Plan	<input type="checkbox"/>	<input type="checkbox"/>
8. Permits (Local, State, Federal)	<input type="checkbox"/>	<input type="checkbox"/>
9. Site Inspection	<input type="checkbox"/>	<input type="checkbox"/>
10. Digital Format Enclosure	<input type="checkbox"/>	<input type="checkbox"/>
11. Permittee Signature	<input type="checkbox"/>	<input type="checkbox"/>

Attachment 4

Biological Resource Mitigation Measures from the California High-Speed Train: Merced to Fresno Section Final Project EIR/EIS

CALIFORNIA HIGH-SPEED TRAIN PROJECT EIR/EIS MERCED TO FRESNO SECTION

Mitigation Measures for Biological Resources

Bio-MM#1: Designate Project Biologist(s), Contractor's Biologist(s), and Project Biological Monitor(s). During contract procurement and for construction management and Contractor selection and prior to ground-disturbing activities, the Authority or its designee will designate a Project Biologist(s), a Contractor's Biologist(s), and a Project Biological Monitor(s) responsible for conducting biological monitoring, overseeing regulatory compliance requirements, and monitoring restoration activities associated with ground-disturbing activities in accordance with the adopted mitigation measures and applicable laws.

The Project Biologist's duties include reviewing design documents and construction schedules and determining which Project Biological Monitor(s), depending on type of biological issues, need(s) to report to the construction site each day. The Project Biologist informs the Biological Monitors as to which mitigation measures should be documented each day and of any special issues that arise during meetings with the construction management team and/or the Contractor's team. The Contractor's Biologist is responsible for the timely implementation of the biological mitigation measures as outlined in the MMRP and construction documents and pertinent resource agency permits. The Project Biological Monitor's duties include monitoring construction crew activities, as needed, to document compliance with applicable mitigation measures and permit conditions.

Bio-MM#2: Regulatory Agency Access. If requested, before, during, or upon completion of ground disturbing activities, the Contractor will allow access by the USFWS, USACE, SWRCB, and CDFG staff to the construction site. Due to safety concerns, all visitors will check in with the Resident Engineer prior to accessing the construction site. The final product will be a memorandum prepared by the Project Biologist within 1 day documenting agency access and issues raised during the field meeting and submitted to the Mitigation Manager. Any non-compliance issues will be reported to the Authority or its designee.

Bio-MM#3: Prepare and Implement a Worker Environmental Awareness Program. Prior to ground-disturbing activities, the Mitigation Manager or designee will prepare and implement a WEAP for construction crews. WEAP training materials will include the following: discussion of the federal ESA, CESA, BGEPA, and the MBTA; consequences and penalties for violation or noncompliance with these laws and regulations and project permits; identification and value of special-status plants, special-status wildlife, jurisdictional waters, and special-status plant communities; hazardous substance spill prevention and containment measures; the contact person in the event of the discovery of a dead or injured wildlife species; and review of mitigation measures. In the WEAP, the Mitigation Manager will detail construction timing in

relation to habitat and species' life stage requirements and discuss project maps, showing areas of planned minimization and avoidance measures.

A fact sheet conveying this information will be prepared by the Mitigation Manager for distribution to the construction crews and to other individuals who enter the construction footprint. Upon completion of the WEAP training, construction crews will sign a form stating that they attended the training and understand and will comply with the information presented. Construction crews will be informed during the WEAP training that, to the extent possible, travel within the marked project site will be restricted to established roadbeds. Established roadbeds include all pre-existing and project-constructed unimproved, as well as improved roads.

Bio-MM#4: Prepare and Implement a Weed Control Plan. Prior to ground-disturbing activities, the Contractor will prepare and implement a Weed Control Plan to minimize or avoid the spread of weeds during ground-disturbing activities. The Weed Control Plan will address the following:

- Schedule for conducting noxious weed surveys to be conducted in coordination with the Biological Resources Management Plan (BRMP)(Bio-MM#5).
- Success criteria for noxious and invasive weed control as established by a qualified biologist. The success criteria will be linked to the HMMP for compensatory mitigation sites, and the standards for onsite work during construction will limit invasive species to less than 5% and non-native herbaceous species to less than 25%. If these success criteria have not been met by the end of the BRMP monitoring and implementation period, monitoring and control efforts will continue and remedial actions will be identified and implemented until success criteria are met. Based on monitoring results, additional or revised measures may be needed to ensure the introduction and spread of noxious weeds is not promoted by the construction and operation of the HST.
- Provisions to ensure that the development of the Weed Control Plan will be coordinated with development of the Restoration and Revegetation Plan (RRP)(Bio-MM#6) so that the RRP incorporates measures to reduce the spread and establishment of noxious weeds and incorporates percent cover of noxious weeds into revegetation performance standards.
- Identify weed control treatments including permitted herbicides, and manual and mechanical methods for application. Restrict herbicide application from use in environmentally sensitive areas (ESAs).
- Determine timing of the weed control treatment for each plant species.
- Identify fire prevention measures.

The Contractor will implement the Weed Control Plan during the construction period and require that maintenance crews follow the guidelines in the Weed Control Plan during the project period. The Authority or its designee will appoint the responsible party during the operations period. A monthly memorandum will be prepared by the Project Biologist to document the progress of the plan and its implementation.

Bio-MM#5: Prepare and Implement a Biological Resources Management Plan. During final design, and prior to construction, the Project Biologist will prepare the Biological Resources Management Plan (BRMP) and assemble the biological resources mitigation measures. In the BRMP, the Project Biologist will include terms and conditions from applicable permits and agreements and make provisions for monitoring assignments, scheduling, and responsibility. The BRMP will also include habitat replacement and revegetation protection during ground-disturbing activities, performance (growth) standards, maintenance criteria, and monitoring requirements for temporary and permanent native plant community impacts. The BRMP will form the parameters for the biology mitigation measures from the EIR/EIS, including terms and conditions as applicable from the USFWS, USACE, SWRCB, and CDFG permits. The BRMP will be prepared for all phases of project implementation but may be exclusively prepared for each construction package.

The goal of the BRMP is to assist the Project Biologist with an organized reporting tool to ensure the mitigation measures and terms and conditions are implemented in a timely manner and are reported on. These include all avoidance, minimization, repair, mitigation, and compensatory actions stated in the mitigation measures or terms and conditions from the permits referenced above. These measures and conditions are tracked through final design, implementation, and post-construction phases. Specific performance standards are habitat-based and are related to success of onsite or offsite repair of temporary impacts, or more permanent impacts that are compensated at an offsite location. Habitat based mitigation applies to compensatory mitigation or permittee-responsible mitigation for impacts on special-status plants, special-status wildlife, special-status plant communities, or jurisdictional waters and are generally addressed in the Bio-MM#58 as part of the HMMP. Performance standards are targets for determining the effectiveness of the mitigation and assessing the need for adaptive management (e.g., mitigation design or maintenance revisions). Success criteria are formal criteria that must be met after a specific timeframe to meet regulatory requirements of the permitting agencies. These are habitat-based performance standards that include consideration for the establishment of a species or habitat. Since species are nested within habitats, the performance standards are primarily based on vegetation, substrate, and hydrology conditions. The performance standards for the establishment of any temporary or permanent impacts on these resources are recognized in those resource categories, but are more specifically covered in the specific performance standards/guidelines shown in Bio-MM#58. The overarching goal is to neutralize the impacts with respect to species and habitat impacted.

The BRMP will help the long-term perpetuation of biological resources within the temporarily disturbed areas, as well as protect adjacent targeted habitats. The BRMP will contain but not be limited to the following information:

- a. Specific measures for the protection of special-status species.
- b. Identification (on construction plans) of the locations and quantity of habitats to be avoided or removed, including locations where habitats are to be restored.
- c. Procedures for vegetation analyses of temporarily impacted habitats to approximate their relative composition, as well as procedures for site preparation, irrigation, planting, and maintenance. This information may be used to determine the requirements of the revegetation areas for both onsite temporary impacts and offsite compensatory sites.
- d. Sources of plant materials and methods of propagation.
- e. Specific parameters for determining the amount of replacement habitat for temporary disturbance areas identified consistent with mitigation ratios and permit conditions.
- f. Specification of parameters for maintenance and monitoring of re-established habitats, including weed control measures, frequency of field checks, and monitoring reports for temporary disturbance areas.
- g. Specification of performance standards for the re-established plant communities within the construction limits.
- h. Remedial measures, such as a form of adaptive management, to be taken if performance standards are not met.
- i. Methodologies and requirements for monitoring the restoration/replacement efforts, which will be a combination of qualitative and quantitative data consistent with mitigation measures and permit conditions.
- j. Measures to preserve topsoil and control erosion.
- k. Design of protective fencing around ESAs and ERAs and the construction staging areas.
- l. Specification of location and quantities of gallinaceous guzzlers (catch basin/artificial watering structures) if needed; specification of monitoring of water levels in guzzlers.
- m. Location of trees to be protected as wildlife habitat (roosting sites) and locations for planting replacement trees.
- n. Specification of the purpose, type, frequency, and extent of chemical use for insect and disease control operations as part of vegetative maintenance within sensitive habitat areas.
- o. Specific construction monitoring programs for habitats of concern and special-status species, as needed.

- p. Specific measures for the protection of vernal pool habitat and riparian areas. These measures may include but are not limited to: erosion and siltation control measures, protective fencing guidelines, dust control measures, grading techniques, construction area limits, and biological monitoring requirements.
- q. Provisions for biological monitoring during ground-disturbing activities to confirm compliance and success of protective measures. The monitoring procedures will: (1) identify specific locations of wildlife habitat and sensitive species to be monitored, (2) identify the frequency of monitoring and the monitoring methodology (for each habitat and sensitive species to be monitored), (3) list required qualifications of biological monitor(s), and (4) identify reporting requirements.

Bio-MM#6: Prepare and Implement a Restoration and Revegetation Plan. During final design, the Contractor's Biologist will prepare a restoration and revegetation plan (RRP) for upland communities and verified by the Project Biologist. This is a complement for site restoration in addition to the temporary effects for riparian plant communities (Bio-MM#15) and for jurisdictional waters (Bio-MM#44). In the RRP, address impacts on habitat subject to temporary ground disturbances that will require decompaction or regrading, if appropriate. The standards for onsite work during construction will limit invasive species to less than 5% and nonnative herbaceous species to less than 25% unless otherwise called out in the final approved seed mix. The Project Biologist will approve the seed mix.

During ground-disturbing activities, the Contractor will implement the RRP in temporarily disturbed areas. The Project Biologist will prepare and submit compliance reports to document implementation. The RRP compliance reports will be prepared and submitted to the Mitigation Manager.

Bio-MM#7: Delineate Environmentally Sensitive Areas and Environmentally Restricted Areas (on plans and in-field). Prior to ground-disturbing activities, to the extent practicable, the Project Biologist will verify that environmentally sensitive areas (ESAs) and environmentally restricted areas (ERAs) are delineated as appropriate. ESAs are areas within the construction zones containing suitable habitat for special-status species and habitats of concern that may allow construction activities, but have restrictions based on the presence of special-status species or habitats of concern at the time of construction. ERAs are areas outside the construction footprint that must be protected in-place during all construction activities. Prior to ground-disturbing activities, the Contractor's Biologist will include all ESAs and ERAs on final construction plans (including grading and landscape plans). Prepare, review and approve the map of all ESAs and ERAs on the design drawings and work to update the map as necessary. Prior to ground-disturbing activities, the Contractor will mark ESAs and ERAs with high visibility temporary fencing to prevent encroachment of construction personnel and equipment onto sensitive areas. Designate the two categories, ESA and ERA, differently in the field (e.g., different colored flagging/fencing). Use sub-meter accurate GPS equipment to

delineate all ESAs and ERAs. Remove ESA and ERA fencing when construction is complete or the resource has been cleared according to agency permit conditions in the MMRP and construction drawings and specifications. The Project Biologist will submit memoranda regarding the field delineation of all ESAs/ERAs to the Mitigation Manager. These areas will receive ongoing monitoring during site preparation and construction activities.

Bio-MM#8: Equipment Staging Areas. Prior to ground-disturbing activities, the Contractor will locate staging areas for construction equipment outside sensitive biological resources including habitat for special-status species, habitats of concern (e.g., wetlands, waters of the U.S., riparian communities), and wildlife movement corridors, to the maximum extent possible. The Project Biologist will submit memoranda to the Mitigation Manager documenting compliance.

Bio-MM#9: Mono-Filament Netting. During ground-disturbing activities, the Project Biologist will verify that plastic mono-filament netting (erosion-control matting) or similar material is not used in erosion control materials; substitutes include coconut hair matting or tackified hydroseeding compounds. The Project Biologist will submit memoranda to the Mitigation Manager documenting compliance monthly, or as appropriate, through the life of the project construction.

Bio-MM#10: Vehicle Traffic. During ground-disturbing activities, the Contractor will restrict project related vehicle traffic, within the construction area, to established roads, construction areas, and other designated areas. Establish vehicle traffic locations disturbed by previous activities to prevent further adverse effects. Observe a 20 mph speed limit for construction areas with potential special-status species habitat. Clearly flag and mark access routes and prohibit off-road traffic. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance on a weekly basis.

Bio-MM#11: Entrapment Prevention. The Contractor's biologist will cover all excavated, steep-sided holes or trenches, more than 8 inches deep, at the close of each working day with plywood or similar materials, or provide a minimum of one escape ramp per 10 feet of trenching constructed of earth fill. The Contractor's Biologist will thoroughly inspect such holes or trenches for trapped animals before leaving the construction site each day. The Contractor's Biologist will screen all culverts, or similar enclosed structures, with a diameter of 4 inches or greater to prevent use by wildlife. The Contractor's Biologist will ensure that cleared and stored material at the construction site for common and special-status wildlife species before the material is subsequently used or moved. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance on a weekly basis.

Bio-MM#12: Work Stoppage. During ground-disturbing activities, the Project Biologist or Biological Monitor will halt work in the event that a special-status wildlife species gains access to the construction footprint. This work stoppage will be coordinated with the resident engineer

and/or the Authority or its designee. The work stoppage will occur within the area where the potential construction activity could affect the species; other work may continue. This will be determined prior to direction given to the Contractor. At this direction, the Contractor will suspend ground-disturbing activities in the immediate construction area that could reasonably result in a "take" of special-status wildlife species. The Contractor will continue the suspension until the individual leaves voluntarily, is relocated to a release area using USFWS- and/or CDFG-approved handling techniques and relocation methods, or as required by USFWS or CDFG. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance within 1 day of the work stoppage and subsequent action.

Bio-MM#13: 'Take' Notification and Reporting. The Contractor's Biologist in coordination with the Project Biologist and Mitigation Manager will notify the USFWS and/or CDFG immediately in the case of an accidental death or injury to a federal or state listed species during project-related activities. The Authority or its designee will be notified prior to the notification to the agencies. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#14: Post-Construction Compliance Reports. After each construction period is completed, the Project Biologist will submit post-construction compliance reports consistent with the appropriate agency (e.g., USFWS, NMFS, and CDFG) protocols, including compliance with resource agency permits (i.e., Section 7 of the federal ESA, Section 2081 of CESA and Section 401 and 404 of FCWA and 1600 of Fish and Game Code). The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance. The frequency of the memorandum compilation and submission will be consistent with regulatory compliance permits.

Bio-MM#15: Restore Temporary Riparian Impacts. During post-construction, the Contractor's Biologist will revegetate all disturbed riparian areas using appropriate plants and seed mixes. The Project Biologist will monitor restoration activities consistent with provisions in the HMMP as described in Bio-MM#58. Performance standards for riparian communities are generally described in Bio-MM#58. It is important to recognize that Bio-MM#58 includes standards that apply to several resource areas (e.g., jurisdictional waters, riparian habitat, California tiger salamander habitat). The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance and other reporting requirements in the 1600 Streambed Alteration Agreement.

Bio-MM#16: Mitigation and Monitoring of Protected Trees. Protected trees are those that are identified within local planning jurisdiction documents/ordinances that have policies toward protection. Prior to, during, and post-construction, the Contractor's Biologist will implement the following methods to preserve and/or mitigate impacts on protected trees:

- (1) The Contractor will conduct pre-construction surveys to evaluate the condition of all ornamental and native trees found within urban areas directly and indirectly affected by the proposed project.
- (2) The Contractor will transplant all directly affected trees that are in good condition to a suitable site outside the construction footprint.
- (3) The Contractor will fence trees which may be indirectly affected by construction activities 5 feet from their driplines to form exclusion zones.
- (4) The Contractor will prepare a monitoring and maintenance program to monitor transplanted trees for re-establishment of root systems.

The Project Biologist will submit a memorandum to document compliance to the Mitigation Manager on a monthly basis as needed pending construction progress.

Bio-MM#17: Conduct Pre-Construction Surveys for Special-Status Plant Species. The Project Biologist will conduct pre-construction surveys for special-status plant species in suitable habitat areas, subject to ground-disturbing activities. The surveys will be conducted in the appropriate season prior to ground-disturbing activities for salvage and relocation activities. The Project Biologist will use the results of the Special-Status Plants Survey Report (prepared as part of the Biological Resources Technical Report), including mapping of locations of special-status plant species, to determine focused locations for the pre-construction surveys, as appropriate. The Project Biologist will work with the Contractor's Biologist to mark and avoid locations of all special-status plant species observed where feasible or incorporate the species into the relocation/compensation program defined in Bio-MM#50: Compensate for Impacts on Special-Status Plant Species.

Prior to ground-disturbing activities, the Contractor will protect any populations of special-status plant species identified during the surveys within 100 feet of the construction footprint as ERAs. As appropriate, the Contractor's Biologist will update the special-status or habitats of concern mapping within the construction limits, based upon resource agency permits.

The Contractor's Biologist will determine the locations of special-status plant species on construction drawings and identified as ESAs within the construction footprint. Plant populations within 100 feet of the construction limits will be fenced as ERAs by the Contractor's Biologist. Terms and conditions from Section 7 and Section 2081 agreements will be incorporated as appropriate. The Project Biologist will provide verification and report through memorandum to the Mitigation Manager.

Bio-MM#18: Prepare and Implement Plan for Salvage, Relocation, and/or Propagation of Special-Status Plant Species. The Contractor's Biologist will prepare a plan prior to ground-disturbing activities to address monitoring, salvage, relocation, and propagation of special-status plant species. The plan will be submitted to the Project Biologist for concurrence. The

relocation or propagation of plants and seed will be performed at a suitable mitigation site, as appropriate per species. Documentation will include provisions that address the techniques, location, and procedures required for the successful establishment of the plant populations. The plan will include provisions for performance that address survivability requirements, maintenance, monitoring, implementation, and the annual reporting requirements. Permit conditions issued by the appropriate resource agencies (e.g., USFWS, CDFG) will guide the development of the plan and performance standards. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#19: Conduct Pre-Construction Sampling and Assessment for Vernal Pool Fauna. Prior to ground-disturbing activities, the Project Biologist will conduct pre-construction, non-protocol surveys in seasonally inundated habitats (seasonal wetland, noninundated wetlands) within the construction footprint. The Project Biologist will conduct general aquatic surveys at a suitable interval after the first significant storm event of the rainy season (October 15 to June 1), as feasible prior to ground-disturbing activities. The sampling is an assessment of the hydrological, biological and ecological conditions of each seasonal wetland and open waters. This assessment will determine the quality and suitability of seasonal wetlands for special-status species (e.g., vernal pool branchiopods, western spadefoot toads, and California tiger salamanders) and later assist in determining which materials (e.g., soils, viable plant seeds, vernal pool cysts) may be collected. The sampling is an assessment that will be useful in understanding the species present and will help guide the implementation of performance standards to be consistent with Bio-MM#21: Implement and Monitor Vernal Pool Protection, for vernal pool special status species (e.g., vernal pool branchiopods, western spadefoot toads, and California tiger salamanders). The Project Biologist will submit a report within 1 month of completing the field work and submit to the Mitigation Manager and Authority or its designee. The report will provide the documentation and the results of the sampling, including the results of the data collected and compared with the performance standards.

Bio-MM#20: Seasonal Vernal Pool Work Restriction. For seasonal avoidance of special-status vernal pool branchiopods and vernal pool-dependent species (e.g., California tiger salamander), the Contractor will not work within 250 feet of aquatic habitats suitable for these species (e.g., vernal pools and other seasonal wetlands) from October 15 to June 1 (corresponding to the rainy season), or as determined through informal or formal consultation with the USFWS or USACE. Ground-disturbing activities may begin once the habitat is no longer inundated for the season. If any work remains to be completed after October 15, exclusion fencing and erosion control measures will be placed at the vernal pools and other seasonal wetlands by the Contractor's Biologist. The fencing will act as a buffer between ground-disturbing activities and the vernal pools and other seasonal wetlands as determined through consultations with USFWS/USACE. The Project Biologist will document compliance through a memorandum to the Mitigation Manager during the establishment of the fencing activities.

Bio-MM#21: Implement and Monitor Vernal Pool Protection. If temporary impacts can be avoided, the vernal pool(s) will be protected by erecting exclusion fencing. The Contractor's Biologist, under the supervision of the Project Biologist, will erect and maintain the exclusion fencing. For temporary impacts on vernal pools and other seasonal wetlands that cannot be avoided, the Contractor's Biologist will apply geotextile fabric and a layer of gravel over the affected vernal pool(s) prior to ground disturbing activities to protect the contours in cases where the area may be excluded from the permanent construction footprint. The Contractor will implement this measure within temporary impact areas within the construction footprint. Resource agency consultations with the USFWS/USACE will occur as needed and based on permit conditions.

- If temporary impacts occur over a full wet-dry season cycle and the vernal pool(s) cannot be avoided, the vernal pool(s) will be protected by erecting exclusion fencing by the Contractor's Biologist.
- If temporary impacts occur within the dry season (approximately June 1 to October 15) and the vernal pool(s) cannot be fenced, geotextile fabric and rinsed gravel should be placed within and cover the vernal pool(s) to minimize damage to the soils. The Contractor's Biologist in coordination with the Project Biologist will collect a representative sampling of soils from the vernal pool(s) prior to initiating ground-disturbing activities within vernal pools. The representative soil sample(s) will contain viable plant seeds and vernal pool branchiopod cysts to be preserved from the vernal pool(s). These samples may be incorporated into other vernal pools, as applicable, with USFWS and/or CDFG consultation. If temporary impacts take more than two full wet-dry season cycles, the above described soil storage and/or offsite mitigation will be implemented.

Bio-MM#22: Implement Conservation Guidelines During the Construction Period for Valley Elderberry Longhorn Beetle. Prior to and during ground-disturbing activities, the Contractor will implement the avoidance and minimization measures detailed in the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999a). These measures include establishing and maintaining appropriate buffer areas around elderberry plants, surveying for beetle boreholes in affected shrubs, restricting the use of chemicals that might harm beetles, and mowing. After ground-disturbing activities are completed, restore any damage to buffer areas containing elderberry shrubs according to specifications within the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999a).

In areas where encroachment on the 100-foot buffer has been approved by the USFWS, the Contractor will provide a minimum setback of at least 20 feet from the dripline of each Mexican elderberry plant. In buffer areas, ground-disturbing activities should be minimized, and any damaged area should be restored by the Contractor following construction.

The Contractor will erect signage every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a federally threatened species, and must not be disturbed. This species is protected by the federal ESA of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained by the Contractor for the duration of ground-disturbing activities.

To prevent encroachment, these buffer areas must continue to be protected per USFWS protocol (after ground-disturbing activities) from adverse effects of the project (USFWS 1999a) during the construction phase. The Contractor will include protective measures such as fencing, signage, weeding, and trash removal to enforce the protection of the valley elderberry longhorn beetle and its associated habitat. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance on a weekly basis or at other appropriate intervals.

Bio-MM#23: Translocation of California Tiger Salamanders. Prior to ground-disturbing activities, the Project Biologist or designee will conduct a pre-construction survey and relocate any California tiger salamanders from within the construction footprint in accordance with the Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander (USFWS 2003). The relocation will occur for any individuals within the construction footprint per coordination with the USFWS. The Project Biologist will conduct pit trapping. The Contractor's Biologist will work in coordination with the Project Biologist when installing amphibian exclusion fencing specified in Bio-MM#24. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance on a weekly basis or at other appropriate intervals.

Bio-MM#24: Erect Amphibian Exclusion Fencing. The Contractor's Biologist will install exclusion barriers (i.e., silt fences) to influence the movement of California tiger salamander, including other amphibian species, within impacted areas. The barriers can be used to exclude California tiger salamander, and other amphibian species, from ground-disturbing areas and to guide breeding adults toward pre-identified mitigation ponds. Exclusion fencing will be maintained by the Contractor throughout the California tiger salamander's entire active period (November to April) or until all ground-disturbing activities are completed, whichever occurs first. Exclusion fencing must be trenched into the soil at least 4 inches in depth with the soil compacted against both sides of the fence for its entire length to prevent amphibians from passing under the fence. Barriers must be inspected by the Contractor's Biologist at least twice weekly on non-consecutive days and after any significant rain event (defined as a 0.75 inch downpour or 1.5 inches of rain in any 24-hour period). Barriers will be installed by the Contractor with turn-arounds at any access openings needed in the fencing, to redirect amphibians away from openings. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#25: Conduct Emergence and Larval Surveys for Western Spadefoot Toad. The Project Biologist or designee (qualified herpetologist) will conduct pre-construction emergence and larval surveys for western spadefoot toad during the fall and winter rainy season. Emergence surveys will be conducted within the appropriate time period(s) after precipitation events as evaluated by a qualified herpetologist and will be partially in tandem with California tiger salamander surveys. Potential breeding depressions, including vernal pools, will be surveyed for western spadefoot toad larvae concurrently with special-status vernal pool branchiopod and California tiger salamander pre-construction surveys. Adults found within the construction footprint during emergence surveys will be relocated to an appropriate area adjacent to another pool suitable for breeding. Pre-construction surveys will help identify the proper implementation of mitigation measures, identify state and federal permit requirements, and inform the accurate implementation of mitigation requirements. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance after surveys are complete.

Bio-MM#26: Conduct Western Pond Turtle Pre-Construction Surveys and Relocation. Prior to ground-disturbing activities, conduct pre-construction surveys for western pond turtles to determine the presence or absence of western pond turtles within the construction footprint. If western pond turtles are found within the construction footprint, conduct daily clearance surveys prior to the initiation of any construction activities.

If a western pond turtle nest will be affected by ground-disturbing activities, relocate the eggs according to relocation protocol coordinated with CDFG for all life stages of western pond turtles. Relocate hatchling and adult turtles outside of the construction footprint in suitable habitat. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#27: Conduct Western Pond Turtle Monitoring. During ground-disturbing activities, the Project Biologist will observe all construction activities within habitat that supports populations of western pond turtles. If ESAs are deemed necessary, the Project Biologist will conduct a clearance survey for western pond turtles prior to the time the fence is installed. If necessary, conduct daily clearance surveys prior to construction. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#28: Implement Western Pond Turtle Avoidance and Relocation. Prior to ground disturbing activities, if a western pond turtle nesting area is present and will be affected by ground disturbing activities as determined by the Project Biologist, the Contractor will avoid western pond turtle nesting areas. If avoidance is not feasible, as determined by the Authority or its designee, the Project Biologist will coordinate with CDFG to identify where to relocate western pond turtles. The Project Biologist will coordinate specific trapping and relocation protocols with CDFG for adults, hatchlings, and eggs prior to ground-disturbing activities. The Contractor will not move eggs or hatchlings without prior coordination with the Project Biologist

and concurrence from CDFG. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance on a weekly basis or as determined appropriate pending construction progress.

Bio-MM#29: Conduct Pre-Construction Surveys and Monitoring for Raptors. Prior to ground disturbing activities, the Project Biologist or designee will conduct pre-construction surveys for nesting raptors if construction and habitat removal activities are scheduled to occur during the breeding season (February 1 to August 15). The Project Biologist or designee will conduct surveys in areas within 300 feet of the construction footprint. Modify the required survey dates based on local conditions. If breeding raptors with active nests are found, establish a 300-foot buffer around the nest and phase construction activities within the buffer(s) until the young have fledged from the nest or the nest is abandoned. Approve construction activities within the buffer area, pending site conditions that will not jeopardize the nest.

The Project biologist will conduct pre-construction surveys for bald and golden eagle nests within ¼ mile of the construction footprint. If nesting bald or golden eagles are identified, the Contractor's Biologist in coordination with the Project Biologist will establish a 1,000-foot buffer area. The Project Biologist or designee will adjust the 1,000-foot buffer as needed to reflect existing conditions including ambient noise, topography, and disturbance with the approval of the USFWS or CDFG, as appropriate. The Project Biologist or designee will conduct regular monitoring of the nest to determine success/failure and to confirm that project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails. The Project Biologist or designee will document the results of the surveys and the ongoing monitoring, and provide a copy of the monitoring reports for impact areas to the respective agencies. The Project Biologist or designee will approve ground-disturbing activities within the buffer area, pending site conditions that will not jeopardize the nest. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#30: Conduct Pre-Construction Surveys and Delineate Active Nest Exclusion Areas for Other Breeding Birds. In the event active bird nests are encountered during the pre-construction survey, the Project Biologist or designee will determine the nest avoidance buffer zones as appropriate. The Project Biologist or designee will coordinate with the Contractor's Biologist to establish the suitable buffers consistent with the intent of the MBTA and as determined by the Project Biologist. The Project Biologist or designee will delineate nest avoidance buffers established for ground nesting birds in a manner that does not create predatory bird perch points in close proximity (150 feet) to the active nest site. The Project Biological Monitor will monitor active bird nests weekly or more frequently pending status of nest and status of fledgling development. The Contractor's Biologist will maintain the nest avoidance buffer zone until nestlings have fledged or the nest is abandoned. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#31: Raptor Protection on Power Lines. During final design, the Contractor will verify that the catenary system and masts are designed to be raptor-safe, in accordance with the Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee 2006). The Project Biologist will check the final design drawings and submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#32: Conduct Pre-Construction Surveys for Swainson's Hawks. The Project Biologist or designee will conduct pre-construction surveys for Swainson's hawks during the nesting season (March 1 through September 15) within the construction footprint and within a 0.5-mile buffer. The Project Biologist or designee will conduct the pre-construction nest surveys at least 30 days prior to ground disturbing activities and phase with project construction. The pre-construction surveys will determine the status (i.e., active, inactive) of the nest and then will be used to set up nest avoidance strategies (Bio-MM#33). The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance with the measure.

Bio-MM#33: Swainson's Hawk Nest Avoidance. If active Swainson's hawk nests (defined as a nest used one or more times in the last 5 years) are found within 0.5 mile of the construction footprint during the nesting season (March 1 to September 15), the Contractor's Biologist will implement buffers restricting construction activities, following CDFG's *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (CDFG 1994). Adjustments to the buffer(s) will require prior approval by CDFG as coordinated by the Project Biologist. The buffers and nest condition will then be monitored (see Bio-MM#34). The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance on a weekly basis.

Bio-MM#34: Monitor Removal of Nest Trees for Swainson's Hawks. Prior to ground-disturbing activities, the Project Biologist or designee will monitor nest trees for Swainson's hawks in the construction footprint that are not removed. If a nest tree for a Swainson's hawk must be removed, the Contractor will obtain a Management Authorization (including conditions to offset the loss of the nest tree) from the CDFG, as described in CDFG's *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (CDFG 1994). The Management Authorization will specify the tree removal period, generally between October 1 and February 1. If ground-disturbing activities or other project-related activities may cause nest abandonment by a Swainson's hawk or forced fledging within the specified buffer area, monitoring of the nest site (funded by the Authority) by the Project Biologist will be required to determine if the nest is abandoned. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance on a weekly basis during the appropriate season.

Bio-MM#35: Conduct Pre-Construction Surveys for Burrowing Owls. Prior to ground-disturbing activities, the Project Biologist or designee will conduct pre-construction surveys in accordance with CDFG's Staff Report on Burrowing Owl Mitigation (CDFG 1995). The Project Biologist or designee will conduct these surveys at appropriate timeframes within suitable habitat located in the construction footprint and a 500-foot buffer. Results of the surveys will be used to inform Bio-MM#36. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance on a weekly basis.

Bio-MM#36: Burrowing Owl Avoidance and Minimization. Implement burrowing owl avoidance and minimization measures following CDFG's *Staff Report on Burrowing Owl Mitigation* (CDFG 1995).

- The Contractor will not disturb occupied burrowing owl burrows during the nesting season (February 1 through August 31) unless it is verified that either the birds have not begun egg-laying and incubation, or that juveniles from the occupied burrows are foraging independently and are capable of independent survival as determined by the Project Biologist or designee. Eviction outside the nesting season may be permitted pending evaluation of eviction plans and receipt of formal written approval from the CDFG authorizing the eviction.
- Unless otherwise authorized by CDFG, the Contractor's Biologist will establish a 250-foot buffer (as an environmentally sensitive area) between the construction work area and nesting burrowing owls during the nesting season. The Contractor will maintain this protected area until August 31 or a time set at CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently.
- Unless otherwise authorized by CDFG, the Contractor's Biologist will establish a 160-foot buffer (as an environmentally sensitive area) between the construction work area and occupied burrows during the non-breeding season (September 1 through January 31). The Contractor will maintain this protected area until January 31 or at CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently.

If burrowing owls must be moved away from the construction footprint, the Contractor's Biologist will undertake the passive relocation measures in accordance with CDFG's (1995) guidelines. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance on a weekly basis.

Bio-MM#37: Conduct Pre-Construction Surveys for Special-Status Bat Species. Prior to any ground-disturbing activities, the Project Biological Monitor or designee will conduct a visual and acoustic pre-construction survey for roosting bats. Include a minimum of one day and one evening in the visual pre-construction survey. The Project Biologist, in coordination with the Mitigation Manager, will contact CDFG if any hibernation roosts or active nurseries are

identified within the construction footprint, as appropriate. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#38: Bat Avoidance and Relocation. During ground-disturbing activities, the Contractor will avoid active hibernation roosts. If avoidance of the hibernation roost is not feasible, the Contractor's Biologist will prepare a relocation plan and coordinate the construction of an alternative bat roost with CDFG. The Contractor will implement the Bat Roost Relocation Plan prior to the commencement of construction activities.

Remove roosts with approval from CDFG before hibernation begins (October 31), or after young are flying (July 31), using exclusion and deterrence techniques described in Bio-MM#39 below. The timeline to remove vacated roosts is between August 1 and October 31. All effort to avoid disturbance to maternity roosts will be made during construction activities. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#39: Bat Exclusion and Deterrence. During ground-disturbing activities, if non-breeding or non-hibernating individuals or groups of bats are found within the construction footprint, the bats will be safely excluded by either opening the roosting area to change lighting and airflow conditions, or by installing one-way doors, or other appropriate methods specified by CDFG. The Contractor will leave the roost undisturbed by project-related activities for a minimum of one week after implementing exclusion and/or eviction activities. The Contractor will not implement exclusion measures to evict bats from established maternity roosts or occupied hibernation roosts. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#40: Conduct Pre-Construction Surveys for American Badger. Prior to ground-disturbing activities, the Project Biologist or designee will conduct pre-construction surveys for American badger den sites within suitable habitats in the construction footprint. The Project Biologist will conduct these surveys no more than 30 days before the start of ground-disturbing activities and phase with project build out. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#41: American Badger Avoidance. The Contractor's Biologist will establish a 50-foot buffer around occupied American badger dens. The Contractor will establish a 200-foot buffer around badger maternity dens through the pup-rearing season (February 15 through July 1). Adjustments to the buffer(s) will require prior approval by CDFG as coordinated by the Project Biologist. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#42: Conduct Pre-Construction Surveys for San Joaquin Kit Fox. The USFWS' *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS 1999b) will be implemented as follows for construction related impacts.

Prior to the start of ground-disturbing activities, the Project Biologist or designee will conduct preconstruction surveys in accordance with the USFWS' *San Joaquin Kit Fox Survey Protocol for the Northern Range* (USFWS 1999c). The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#43: Minimize Impacts on San Joaquin Kit Fox. The Contractor's Biologist will Implement USFWS' *Standard Measures for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS 1999b) to minimize ground disturbance-related impacts on this species. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#44: Restore Temporary Impacts on Jurisdictional Waters. During or post-construction, the Contractor will restore disturbed jurisdictional waters using stockpiled and segregated soils. The Contractor's Biologist will conduct revegetation using appropriate plants and seed mixes, and conduct maintenance monitoring consistent with the provisions in the HMMP (Bio-MM#58). The Project Biologist will document compliance with memorandum submitted to the Mitigation Manager.

Bio-MM#45: Monitor Construction Activities within Jurisdictional Waters. During ground disturbing activities, the Project Biological Monitor will conduct monitoring within jurisdictional waters, including monitoring of the installation of protective devices (silt fencing, sandbags, fencing, etc.), installation and/or removal of creek crossing fill, construction of access roads, vegetation removal, and other associated construction activities. The Project Biological Monitor will conduct biological monitoring to document adherence to habitat avoidance and minimization measures addressed in the project mitigation measures and as listed in the USFWS, CDFG, SWRCB, and USACE permits conditions. The Project Biological Monitor will report and document compliance consistent with requirements in the permitting documents, including frequency and timing and submittals.

Bio-MM#46: Wildlife Corridor Undercrossing (Implementation). During construction of the alignment, the Contractor will install designated wildlife undercrossing(s) at the designated locations shown on the construction drawings. To the extent feasible, water crossing structures (those serving either constructed or natural watercourses) should be designed to also accommodate wildlife passage. The Project Biologist will check implementation of the undercrossing to determine consistency with the construction drawings and to confirm that installation is consistent and incorporates applicable conditions from resource agency permits (e.g., 2081, Section 7). The Project Biologist will prepare a memorandum documenting compliance and submit to the Mitigation Manager.

Bio-MM#47: Install Wildlife Fencing. Prior to operation of the HST, the Contractor's Biologist will install free-ranging mammal-proof fencing along portions of the proposed project consistent with final design. The Project Biologist will verify that the installation is consistent with the

designated terms and conditions in the applicable permits. The Project Biologist will prepare and submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#48: Construction in Wildlife Movement Corridors. Before ground-disturbing activities, the Contractor's Biologist will submit a construction avoidance and minimization plan for the Eastman Lake-Bear Creek ECA to the Project Biologist for concurrence. During ground-disturbing activities, the Contractor will keep the Eastman Lake-Bear Creek ECA riparian corridors (including Deadman and Dutchman creeks) free of all equipment, storage materials, construction materials, and any significant potential impediments. The Contractor will minimize ground-disturbing activities within the Eastman Lake-Bear Creek ECA riparian corridors (Deadman and Dutchman creeks) during nighttime hours to the extent practicable. In addition, keep nighttime illumination (e.g., for security) from spilling into the ECA or shield nighttime lighting to avoid illumination spilling into the ECA. Inspections will verify compliance and the Project Biologist will report through an appropriate memorandum to the Mitigation Manager.

Bio-MM#49: Compensate for Permanent Riparian Impacts. The Authority will compensate for permanent impacts on Great Valley mixed riparian forest and other riparian habitats, determined in consultation with the appropriate agencies (e.g., CDFG), by restoring nearby areas to suitable habitat through permittee-responsible mitigation and/or by purchasing credits in a mitigation bank. Other relevant regulatory permits addressing riparian impacts include the CDFG 1600 Streambed Alteration Agreement, the USACE Section 404 Permit, and the SWRCB 401 Permit. The HMMP will provide the planning details as referenced in Bio-MM#58. Bio-MM#58 provides documentation and reporting requirements.

Compensation will be based on the following ratios (acres of mitigation to acres of impact):

- Great Valley Mixed Riparian Forest: 2:1
- Other Riparian: 2:1

Bio-MM#50: Compensate for Impacts on Special-Status Plant Species. Prior to Final Design and during the permitting process, the Authority will comply with CESA and the federal ESA by implementing the following measures:

Purchase credits from an existing mitigation bank or conduct a special-status plant re-establishment program within the same watershed or in proximity to the impact area at a 1:1 ratio. The success of the special status plant species program is related to the success of the vernal pools. Restored areas must be similar in species composition and ecosystem function to the reference habitat to be considered completed and successful at the end of the monitoring period. In general, this means that data collected on restored or enhanced pools must fall within the range of data obtained from reference pools. General performance standards and guidelines are presented in Bio-MM#58.

Mitigate the impacts on special-status plants in accordance with the USFWS Biological Opinion and/or CDFG 2081(b).

The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#51: Implement Conservation Guidelines During the Project Period for Valley Elderberry Longhorn Beetle. The Authority or its designee will conduct compensatory mitigation for the valley elderberry longhorn beetle, including transplantation and replacement of elderberry shrubs, and maintenance for replacement shrubs, following the USFWS' Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999a). Performance standards for valley elderberry longhorn beetle habitat are generally described in Bio-MM#58. It is important to recognize that Bio-MM#58 includes standards that apply to several resource areas (e.g., jurisdictional waters, riparian habitat, California tiger salamander habitat). The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#52: Compensate for Impacts on California Tiger Salamander. The Authority or its designee will determine compensatory mitigation for the temporary and permanent loss of suitable upland and aquatic breeding habitat through agency consultation with the USFWS and CDFG. Performance standards for California tiger salamander habitat are generally described in Bio-MM#58. It is important to recognize that Bio-MM#58 includes standards that apply to several resource areas (e.g., jurisdictional waters, riparian habitat, California tiger salamander habitat). Compensatory mitigation could include one of the following:

- Purchase of credits from an agency-approved mitigation bank.
- Fee-title-acquisition of natural resource regulatory agency-approved property.
- Purchase or establishment of a conservation easement with an endowment for long-term management of the property-specific conservation values.
- In-lieu fee contribution determined through negotiation and consultation with the various natural resource regulatory agencies.
- Implementation of USFWS Biological Opinion and/or CDFG 2081(b).
- The Project Biologist will submit a memorandum documenting compliance to the Mitigation Manager.

Bio-MM#53: Implement Western Pond Turtle Mitigation Measures. The Authority or its designee will mitigate the impacts on western pond turtle in accordance with the USFWS Biological Opinion and/or CDFG 2081(b). The Project Biologist will submit a memorandum documenting compliance to the Mitigation Manager.

Bio-MM#54: Compensate for Loss of Swainson's Hawk Foraging Habitat. To compensate for the loss of Swainson's hawk foraging habitat, the Authority or its designee will provide compensatory mitigation that follows the ratios recommended by CDFG's (1994) Staff Report Regarding Mitigation for Impacts on Swainson's hawks in the Central Valley. The Project Biologist will submit a memorandum documenting compliance to the Mitigation Manager. The ratios are based on the distance from the construction footprint to the closest active nest site (which for this species is defined as a nest used one or more times in the last 5 years), as follows:

- Compensate where impacts on foraging habitat occur within 1 mile of an active nest tree, at a 1:1 ratio on agricultural lands or other suitable foraging habitat; or at a 0.5:1 ratio where habitat can be managed for prey production.
- Compensate where impacts on foraging habitat occur within 5 miles, but more than 1 mile from an active nest tree, at a 0.75:1 ratio.
- Compensate where impacts on foraging habitat occur within 10 miles, but more than 5 miles from an active nest tree, at a 0.5:1 ratio.
- Mitigate the impacts on special-status plants in accordance with the USFWS Biological Opinion and/or CDFG 2081(b).

Bio-MM#55: Compensate for Loss of Burrowing Owl Foraging and Breeding Habitat. The Authority or its designee will provide base compensatory mitigation for the temporary and permanent loss of foraging and breeding habitat on the number of western burrowing owl pairs or individuals affected. Compensation will be at a 6.5:1 ratio (acres of habitat: number of pairs or individuals). Mitigate each occupied burrow destroyed by enlarging or enhancing existing unsuitable burrows at a 2:1 ratio based on CDFG's (1995) Staff Report on Burrowing Owl Mitigation. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#56: Compensate for Destruction of Natal Dens. The Authority or its designee will mitigate the destruction of kit fox natal dens by the purchase of suitable, approved habitat (USFWS and CDFG). Replace habitat at a minimum of 1:1 acre of habitat in order to provide additional protection and habitat in a location consistent with the recovery of the species. Mitigate the impacts on San Joaquin kit fox in accordance with the USFWS Biological Opinion and/or CDFG 2081(b). The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#57: Conduct Delineation of Jurisdictional Waters and State Streambeds. The Authority or its designee, prior to final design, will conduct a jurisdictional delineation, documenting jurisdictional waters and state streambeds consistent with USACE, SWRCB, and CDFG guidance. As part of the delineation, determine the functions and values of the

jurisdictional waters using accepted methods such as the CRAM so that the functions and values have been replaced and that no net loss of jurisdictional waters and state streambed values occurs. Develop habitat replacement guidelines to identify and quantify habitats that are to be removed and identify the locations for restoring or relocating habitats. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#58: Prepare and Implement a Habitat Mitigation and Monitoring Plan. As part of the USFWS, USACE, SWRCB, and CDFG permit applications and prior to ground-disturbing activities, the Authority or its designee will prepare an HMMP to mitigate for temporary and permanent impacts on jurisdictional waters and state streambeds. The HMMP will detail performance standards, including percent cover of native species, survivability, canopy cover requirements, wildlife utilization, the acreage basis, restoration ratios, and the combination of onsite and/or offsite mitigation. Preference shall be given to conduct the mitigation within the same watershed where the impact occurs. The Authority or its designee will conduct work with the USACE, SWQCB, and CDFG to develop appropriate avoidance, minimization, mitigation, and monitoring measures to be incorporated into the HMMP. The intent of the HMMP is to mitigate for the lost functions and values of impacts on jurisdictional waters and state streambeds consistent with resource agency requirements and conditions presented in Sections 404 and 401 of the CWA and Section 1600 of the CFGC. It is also anticipated that since listed species such as California tiger salamander, colusa grass, and vernal pool branchiopods are nested within these habitats, the HMMP will also serve to mitigate for listed species through Section 7 of ESA and CESA 2081. The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance. In the HMMP, the applicant or its designee shall incorporate the following standard requirements consistent with USACE, SWRCB, and CDFG guidelines:

- Description of the project impact/site.
- Goal(s) (i.e., functions and values) of the compensatory mitigation project.
- Description of the proposed compensatory mitigation site.
- Implementation plan for the proposed compensatory mitigation site.
- Maintenance activities during the monitoring period.
- Monitoring plan for the compensatory mitigation site.
- Completion of compensatory mitigation.
- Contingency measures.

Additionally, the following will be included at a minimum for the implementation plan:

- Site analysis for appropriate soils and hydrology.

- Site preparation specifications based on site analysis, including but not limited to grading and weeding.
- Soil and plant material salvage from impact areas, as appropriate to the timing of impact and restoration as well as the location of restoration sites.
- Specifications for plant and seed material appropriate to the locality of the mitigation site.
- Specifications for site maintenance to establish the habitats, including but not limited to weeding and temporary irrigation.

Habitat restoration, enhancement, and/or establishment activities will be conducted on some of the compensatory (i.e., selected permittee-responsible) mitigation sites to achieve the mitigation goals. A detailed design of the mitigation habitats will be created in coordination with the permitting agencies and be described in the HMMP. It is recognized that several HMMPs will be developed consistent with the selected mitigation sites and the resources mitigated at each. The primary engineering and construction contractors will ensure, through coordination with the Project Biologist, that construction is implemented in a manner that minimizes disturbance of such areas to the extent feasible. Temporary fencing will be used during construction to avoid sensitive biological resources that are adjacent to construction areas and can be avoided.

Performance standards are targets for determining the effectiveness of the mitigation and assessing the need for adaptive management (e.g., mitigation design or maintenance revisions). Success criteria are formal criteria that must be met after a specific timeframe to meet regulatory requirements of the permitting agencies. Where applicable, replacement planting/seeding will be implemented if monitoring demonstrates that performance goals or success criteria are not met during a particular monitoring interval.

The criteria for measuring performance will be used to determine whether the habitat improvement is trending toward sustainability (i.e., reduced human intervention) and to assess the need for adaptive management. These criteria must be met for the habitat improvement to be declared successful, both during a particular monitoring year and at the end of the establishment period. These performance criteria will be developed in consultation with the permitting agencies. The criteria include:

- Percent survival of planted trees (65-85%).
- Percent survival of transplanted trees (60–85%).
- Percent relative canopy cover (5–35%).
- Percent cover of invasive species (<1%).
- Percent cover of nonnative herbaceous plants (<10–25%).

- Percent absolute cover of native species (>50–80%).
- Percent relative cover of native species (>50%).
- Percent total cover of plant species (20–75%).
- Percent relative cover of wetland indicator species (75–90%).
- Water level within +/-6 inches (or other measurement) of design.
- Species composition and community diversity, relative to reference sites, and/or as described in the guidelines issued by permitting agencies (e.g., USFWS conservation guidelines for valley elderberry longhorn beetle).

Performance goals and success criteria will be provided for each of the years of monitoring and will be specific to habitat types at each permittee-responsible mitigation site. The monitoring schedule will be detailed in the site-specific HMMPs. To be deemed successful, the site may be required to meet the success criteria only in selected years. However, if success criteria are not met in specific years, remedial measures, including regrading, adjustment to modify the hydrological regime, and/or replacement planting or seeding, must be implemented and that year's monitoring must be repeated the following year until the success criteria are met. The success criteria specified must be reached without human intervention (e.g., irrigation, replacement plantings) aside from maintenance practices described in the site-specific HMMPs for maintenance during the establishment period.

Where the HST alignment affects an existing mitigation bank, the Authority or its designee will modify the mitigation ratio to meet the vernal pool mitigation requirement. The Authority or its designee will relocate the affected portion of the mitigation bank or compensate the landowner in accordance with the Uniform Relocation and Real Property Policy Act of 1970, as amended.

The Project Biologist will oversee the implementation of all HMMP elements and monitor consistent with the prescribed maintenance and performance monitoring requirements.

The Project Biologist will prepare annual monitoring reports for 5 years (or less if success criteria are met as described earlier) and/or other documentation prescribed in the resource agency permits. In addition, the Project Biologist will document compliance and submit to the Mitigation Manager.

Bio-MM#59: Compensate for Permanent Impacts on Jurisdictional Waters. The Authority or its designee will mitigate permanent wetland impacts through compensation determined in consultation with the USACE, SWRCB, USFWS, and CDFG, in order to be consistent with the HMMP (Bio-MM#58). Regulatory compliance for jurisdictional waters includes relevant terms and conditions from the USACE 404 Permit, SWRCB 401 Permit, and CDFG 1600 Streambed Alteration Agreement. The Project Biologist will submit a memorandum to the Mitigation

Manager documenting compliance. Performance standards for jurisdictional waters are generally described in Bio-MM#58. It is important to recognize that Bio-MM#58 includes standards that apply to several resource areas (e.g., jurisdictional waters, riparian habitat, California tiger salamander habitat).

Compensation could include one of the following:

- Purchase of credits from an agency-approved mitigation bank.
- Fee-title-acquisition of natural resource agency-related property.
- Purchase or establishment of a conservation easement with an endowment for long-term management of the property-specific conservation values.
- In-lieu fee contribution determined through negotiation and consultation with the various natural resource regulatory agencies.

Base compensation for permanent impacts on the following ratios (acres of mitigation to acres of impact), pending agency confirmation:

- Vernal pools and other seasonal wetlands: 2:1 Preservation and 1:1 Creation.
- Coastal and Valley Freshwater Marsh: 1:1.
- Other Wetlands: Between 1.1:1 and 1.5:1 (1:1 onsite and 0.1 to 0.5:1 offsite), based on function and values lost.
- Ratios determined in consultation with the appropriate agencies.

The Authority will mitigate impacts on jurisdictional waters by replacing, creating, restoring, or preserving the identified resource at the ratios presented below or other ratio that compensates for functions and values lost. The Authority or its designee will consider modifying the vernal pool mitigation ratio in the final permits based on site-specific conditions and the specific life history requirements of vernal pool branchiopods, California tiger salamanders, and Western spadefoot toads.

Where the HST Alternative affects an existing mitigation bank, the Authority or its designee will modify the mitigation ratio to meet the vernal pool mitigation requirement. Relocate the affected portion of the mitigation bank or provide compensation to the holder of the conservation easement, in accordance with the Uniform Relocation and Real Property Policy Act of 1970, as amended.

Through the HMMP reporting program and the applicable terms and conditions from the USACE 404 Permit, SWRCB 401 Permit, and the CDFG 1600 Streambed Alteration Agreement, the Project Biologist will document compliance and submit to the Mitigation Manager.

Bio-MM#60: Offsite Habitat Restoration, Enhancement, and Preservation.

Prior to site preparation at the mitigation site, the Authority or its designee will consider the offsite habitat restoration, enhancement, or preservation program, and identify short-term temporary and/or long-term permanent effects on the natural landscape. A determination will be made on any effects from the physical alteration of the site to onsite biological resources, including plant communities, land cover types, and the distribution of special-status plants and wildlife.

Appropriate seasonal restrictions (e.g., breeding season) may be applicable if appropriate habitats exist onsite. Activities resulting in the physical alteration of the site include grading/modifications to onsite topography, stockpiling, storage of equipment, installation of temporary irrigation, removal of invasive species, and drainage feature treatments. In general, the long-term improvements to habitat functions and values will offset temporary effects during restoration, enhancement, or preservation activities.

The offsite habitat restoration, enhancement, and preservation program will be designed, implemented, and monitored consistent with the terms and conditions of the USACE Section 404 Permit, CDFG 1600 Streambed Alteration Agreement, and CESA and federal ESA as they apply to their jurisdiction and resources onsite. Potential effects on site-specific hydrology and the downstream resources will be evaluated as a result of implementation of the restoration-related activity. Site-specific BMPs and an SWPPP will be implemented as appropriate.

The Authority or its designee will report on compliance with permitting requirements. The Project Biologist will be responsible for the monitoring and tracking of the program and will prepare a memorandum of compliance and submit to the Mitigation Manager.

Bio-MM#61: Wildlife Corridor Artificial Dens. To prevent predation by larger predators (e.g., coyotes, bobcats, red foxes, and dogs) at wildlife undercrossings, the Contractor's Biologist will install artificial escape tunnels at wildlife-dedicated crossing structure, as needed, to provide escape cover for wildlife (e.g., San Joaquin kit foxes). The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

Bio-MM#62: Monitoring and Reporting of Wildlife Corridor Undercrossings. Prior to final design, the Authority or its designee will prepare the Wildlife Corridor Monitoring Program which will document wildlife usage of the undercrossing(s). The Authority or its designee will monitor and report the wildlife usage of the designated undercrossings during operation of the project consistent with the methods identified in the Wildlife Corridor Monitoring Program.

Bio-MM#63: Compensate for Impacts on Protected Trees. The Contractor will compensate for impacts, including removal or trimming of native protected trees and landscape or ornamental trees, according to the various city and county policies, ordinances, and regulations through one of the following:

- The Contractor will transplant all directly affected protected trees that are judged by the arborist to be in good condition to a suitable site outside the zone of impact.
- The Contractor will replace all directly affected protected trees at onsite or offsite locations, based on the number of protected trees removed, at a ratio to be determined through consultation with the various city and county governmental agencies, but not to exceed 3:1 for native trees or 1:1 for landscape or ornamental trees.
- The Authority will contribute to a city or county tree-planting fund within the jurisdiction of a regulatory agency.
- The Project Biologist will submit a memorandum to the Mitigation Manager documenting compliance.

The comprehensive list of mitigation measures presented in this section is the result of coordination with federal, state, and local agencies including the USFWS, USACE, EPA, CDFG, and SWRCB. Since these agencies are tasked with conserving, protecting, and enhancing biological resources, their input and validation confirms the proposed measures as effective. Additionally, the majority of these measures include monitoring and tracking by approved biologists to verify progress and effectiveness. In the event that conditions are not effective, the mitigation measures include provisions for modifications to meet the mitigation objectives.

Attachment 5

Proposed Lands for Acquisition Form

PROPOSED LANDS FOR ACQUISITION FORM ("PLFAF")

Date: _____

TO: Regional Representative

Facsimile:

FROM: _____

Applicant proposes that the following parcel of land be considered for approval by the CDFW as suitable for purposes of habitat management lands to replace the adverse environmental impacts of the Project:

<u>Section</u>	<u>Township</u>	<u>Range</u>	<u>Number of Acres</u>
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_____	_____	_____	_____
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Current Legal Owner(s), include Parcel Number(s):

Location of Parcel:

APPROVED _____

REJECTED _____

By: _____

Region

DATE: _____

Explanation: _____

Attachment 6

Habitat Management Lands Checklist

ATTACHMENT 6
DEPARTMENT OF FISH AND WILDLIFE

HABITAT MANAGEMENT LAND ACQUISITION PACKAGE CHECKLIST FOR PROJECT APPLICANTS
The following checklist is provided to inform you of what documents are necessary to expedite the Department of Fish and Wildlife (CDFW) processing of your Habitat Management Land acquisition proposal. Any land acquisition processing requests which are incomplete when received, will be returned. The Region contact will review and approve the document package and forward it to the Habitat Conservation Planning Branch Senior Land Agent with a request to process the land acquisition for formal acceptance.

To: _____
Regional Manager, Region Name

From: _____
Project Applicant

Phone: _____

Tracking #: _____
CDFW assigned permit or agreement #

Project Name: _____

Enclosed is the complete package for the ☐ Conservation Easement OR ☐ Grant Deed

Documents in this package include:

☐ Fully executed, approved as to form Conservation Easement Deed or Grant Deed.

Date executed: _____

☐ Proposed Lands for Acquisition Form (PLFAF)

☐ Phase I Environmental Site Assessment Report Date on report: _____
(An existing report may be used, but it must be less than two years old.)

☐ Preliminary Title Report(s) for subject property is enclosed and has been reviewed for encumbrances and other easements. The title report must be less than six months old when final processing is conducted.

Included are additional documents:

☐ document(s) to support title exceptions

☐ document(s) to explain title encumbrances

☐ a plot or map of easements/encumbrances on the property

☐ Policy of Title Insurance (an existing title policy is not acceptable)

☐ County Assessor Parcel Map(s) for subject property

☐ Site Location Map (Site location with property boundaries outline on a USGS 1:24,000 scale topo)

☐ Final Permit or Agreement (or other appropriate instrument)

Type of agreement: ☐ Bank Agreement ☐ Mitigation Agreement

☐ Permit _____ Other: _____
(write in type of permit)

☐ Final Management Plan (if required prior to finalizing permit or agreement or if this package is for a Grant Deed)

☐ Biological Resources Report

☐ Draft Summary of Transactions ☐ hard copy ☐ electronic copy (both are required)